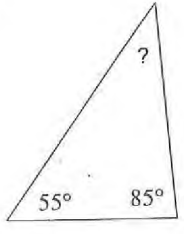


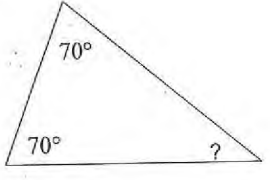
EOC Review #1

Find the measure of each angle indicated.

1)

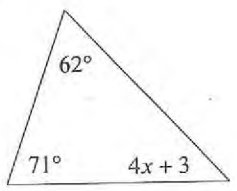


2)

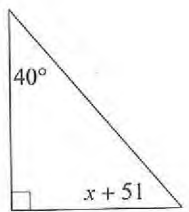


Solve for  $x$ . SHOW ALL WORK!

3)

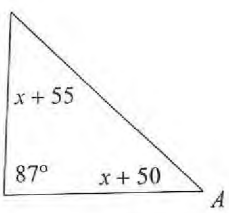


4)

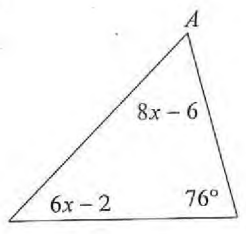


Find the measure of angle A. SHOW ALL WORK!

5)

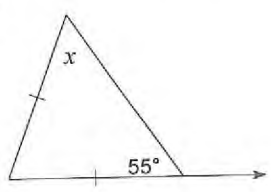


6)

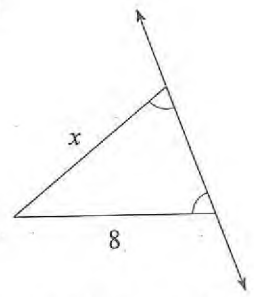


Find the value of  $x$ . SHOW ALL WORK FOR #9-10.

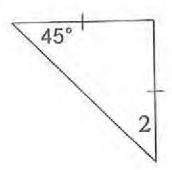
7)



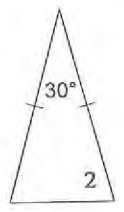
8)



9)  $m\angle 2 = x + 51$



10)  $m\angle 2 = 5x + 15$

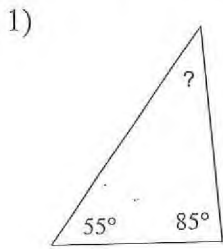


Triangle Sum and Isosceles Triangle Theorem

Name Key #3

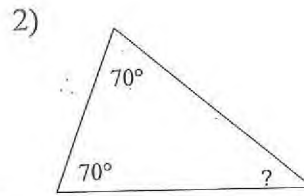
EOC Review #1

Find the measure of each angle indicated.



$$55 + 85 + x = 180$$

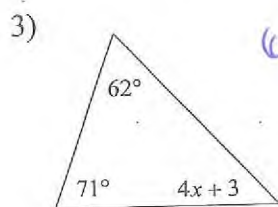
$$x = 40$$



$$70 + 70 + x = 180$$

$$x = 40$$

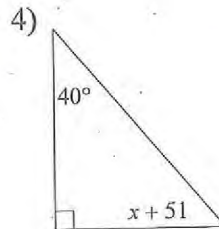
Solve for x. SHOW ALL WORK!



$$62 + 71 + 4x + 3 = 180$$

$$4x = 44$$

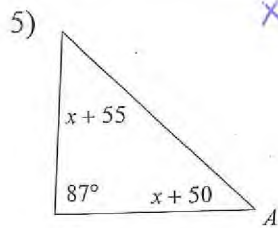
$$x = 11$$



$$40 + 90 + x + 51 = 180$$

$$x = -1$$

Find the measure of angle A. SHOW ALL WORK!



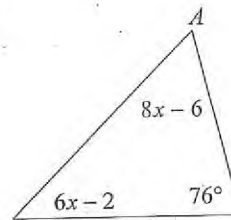
$$x + 55 + 87 + x + 50 = 180$$

$$2x + 192 = 180$$

$$2x = -12$$

$$x = -6$$

$$m\angle A = 44$$



$$8x - 6 + 76 + 6x - 2 = 180$$

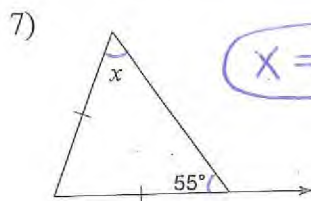
$$14x + 68 = 180$$

$$14x = 112$$

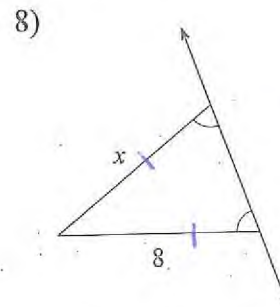
$$x = 8$$

$$m\angle A = 58$$

Find the value of x. SHOW ALL WORK FOR #9-10.

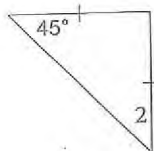


$$x = 55$$



$$x = 8$$

9)  $m\angle 2 = x + 51$

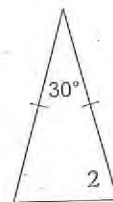


$$45 = m\angle 2$$

$$45 = x + 51$$

$$-6 = x$$

10)  $m\angle 2 = 5x + 15$



$$180 - 30 = 150$$

$$150 \div 2 = 75$$

$$75 = m\angle 2$$

$$75 = 5x + 15$$

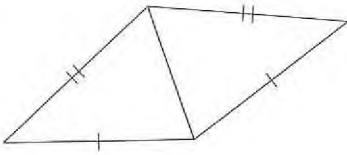
$$60 = 5x$$

$$12 = x$$

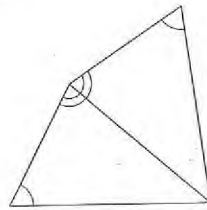
### EOC Review #2

State if the two triangles are congruent. If they are, state how you know.

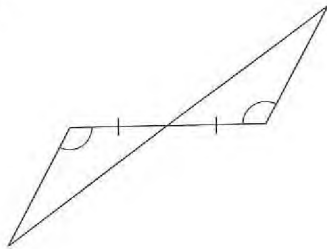
1)



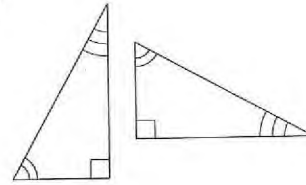
2)



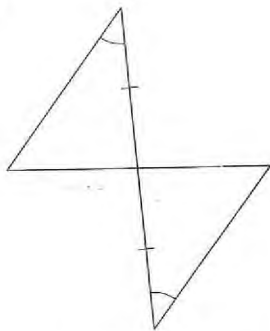
3)



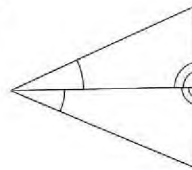
4)



5)

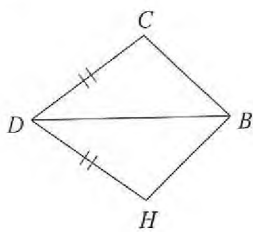


6)

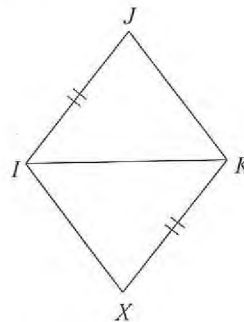


State what additional information is required in order to know that the triangles are congruent for the reason given.

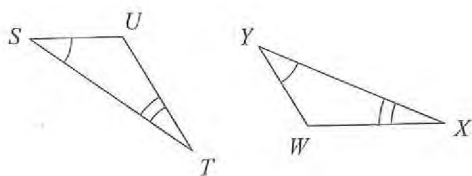
7) SSS



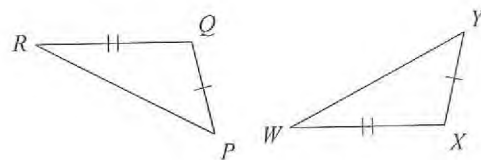
8) SSS



9) ASA

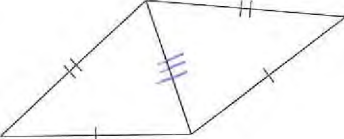


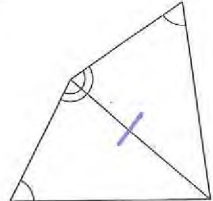
10) SSS

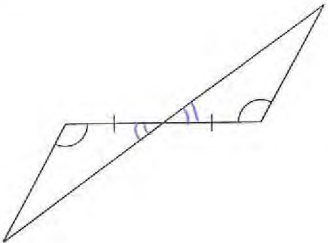


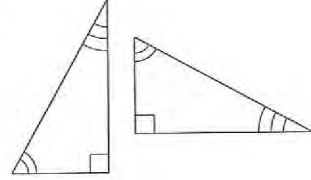
EOC Review #2

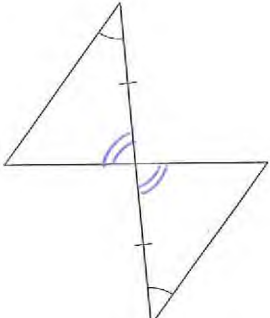
State if the two triangles are congruent. If they are, state how you know.

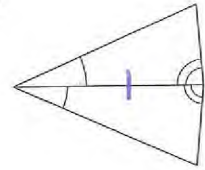
1)  yes  
SSS

2)  yes  
AAS

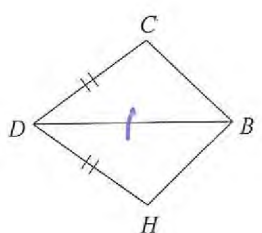
3)  yes  
ASA

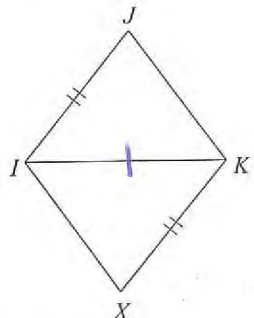
4)  no

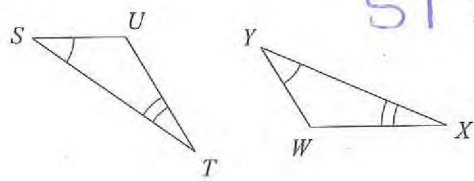
5)  yes  
ASA

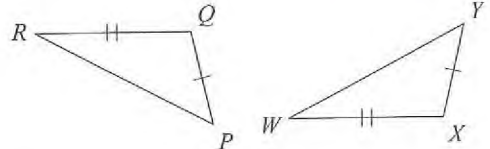
6)  yes  
ASA

State what additional information is required in order to know that the triangles are congruent for the reason given.

7) SSS  $CB \cong HB$   


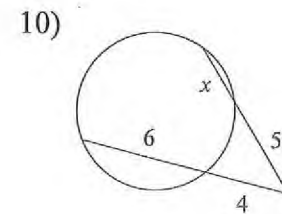
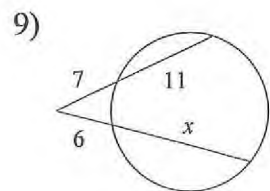
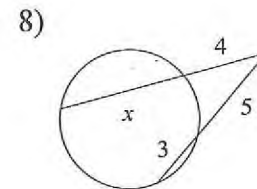
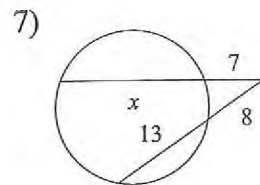
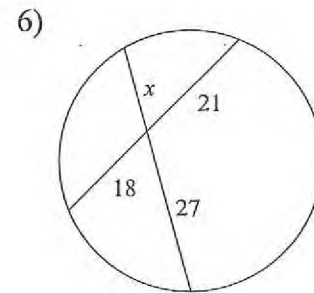
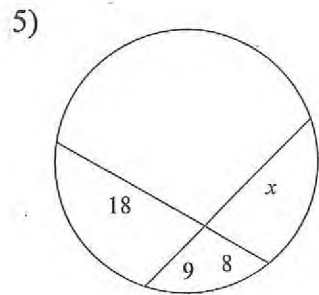
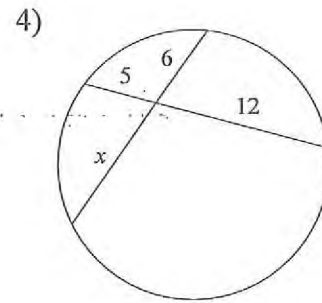
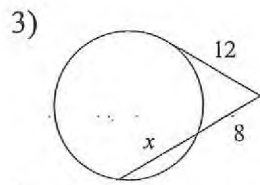
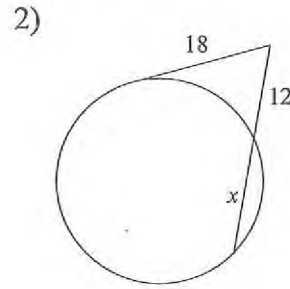
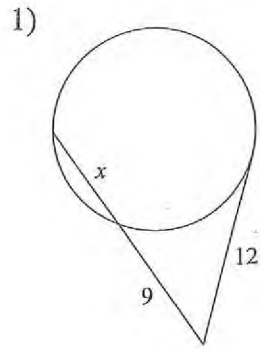
8) SSS  $JK \cong XI$   


9) ASA  $ST \cong YX$   


10) SSS  $RP \cong WY$   


EOC Review #3

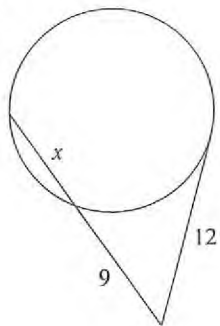
Solve for  $x$ . Assume that lines which appear tangent are tangent.



## EOC Review #3

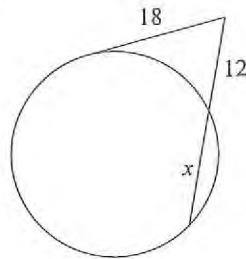
Solve for  $x$ . Assume that lines which appear tangent are tangent.

1)



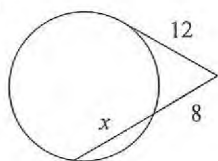
$$\begin{aligned}(x+9) \cdot 9 &= 12^2 \\ 9x + 81 &= 144 \\ 9x &= 63 \\ \mathbf{x} &= \mathbf{7}\end{aligned}$$

2)



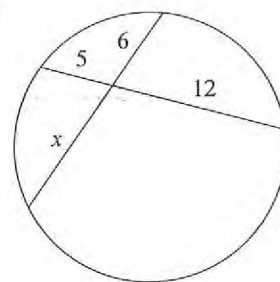
$$\begin{aligned}18^2 &= (12+x) \cdot 12 \\ 324 &= 144 + 12x \\ 180 &= 12x \\ \mathbf{15} &= \mathbf{x}\end{aligned}$$

3)



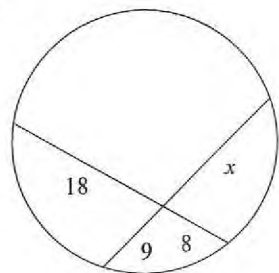
$$\begin{aligned}12^2 &= (x+8) \cdot 8 \\ 144 &= 8x + 64 \\ 80 &= 8x \\ \mathbf{10} &= \mathbf{x}\end{aligned}$$

4)



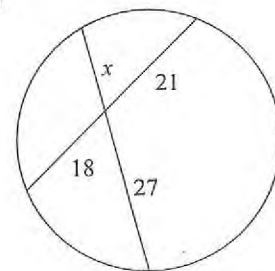
$$\begin{aligned}6 \cdot x &= 5 \cdot 12 \\ 6x &= 60 \\ \mathbf{x} &= \mathbf{10}\end{aligned}$$

5)



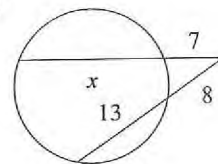
$$\begin{aligned}x \cdot 9 &= 18 \cdot 8 \\ 9x &= 144 \\ \mathbf{x} &= \mathbf{16}\end{aligned}$$

6)



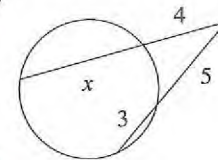
$$\begin{aligned}x \cdot 27 &= 18 \cdot 21 \\ 27x &= 378 \\ \mathbf{x} &= \mathbf{14}\end{aligned}$$

7)



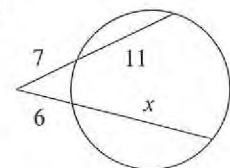
$$\begin{aligned}(x+7) \cdot 7 &= (13+8) \cdot 8 \\ 7x + 49 &= 21 \cdot 8 \\ 7x + 49 &= 168 \\ 7x &= 119 \Rightarrow \mathbf{x} = \mathbf{17}\end{aligned}$$

8)



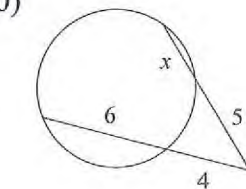
$$\begin{aligned}(4+x) \cdot 4 &= (3+5) \cdot 5 \\ 16 + 4x &= 8 \cdot 5 \\ 16 + 4x &= 40 \\ 4x &= 24 \Rightarrow \mathbf{x} = \mathbf{6}\end{aligned}$$

9)



$$\begin{aligned}(7+11) \cdot 7 &= (6+x) \cdot 6 \\ 18 \cdot 7 &= 36 + 6x \\ 126 &= 36 + 6x \\ 90 &= 6x \\ \mathbf{15} &= \mathbf{x}\end{aligned}$$

10)

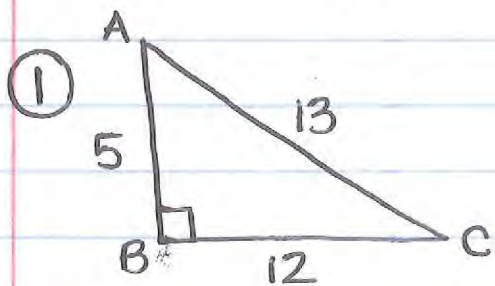


$$\begin{aligned}(6+4) \cdot 4 &= (x+5) \cdot 5 \\ 10 \cdot 4 &= 5x + 25 \\ 40 &= 5x + 25 \\ 15 &= 5x \\ \mathbf{3} &= \mathbf{x}\end{aligned}$$

# EOC Review \* 4 (Unit 2)

[DUE on Fri. Feb. 12 - NO LATE WORK]

\* Go to [cornwellnhs.weebly.com](http://cornwellnhs.weebly.com), "Classroom Resources", "Unit 2" for notes to help in remembering the Unit 2 concepts. \*

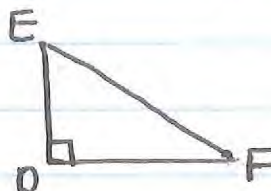
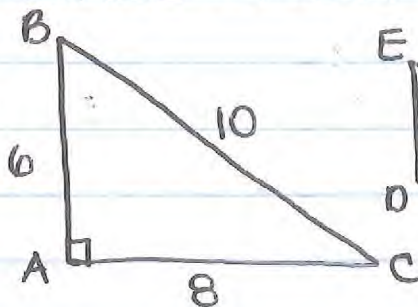


i)  $\tan A =$  \_\_\_\_\_  
ii)  $\cos C =$  \_\_\_\_\_  
iii)  $\sin C =$  \_\_\_\_\_

Write your answer as a fraction.

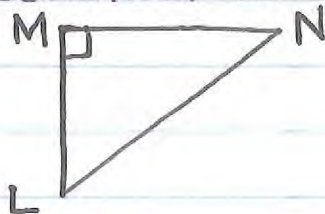
②  $\triangle ABC \sim \triangle DEF$

Write your answer as a decimal.



i)  $\sin F =$  \_\_\_\_\_  
ii)  $\tan E =$  \_\_\_\_\_  
iii)  $\cos E =$  \_\_\_\_\_

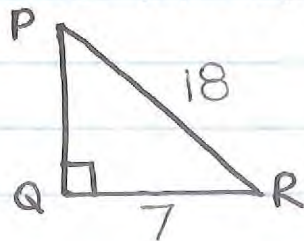
③ Consider  $\triangle LMN$ .



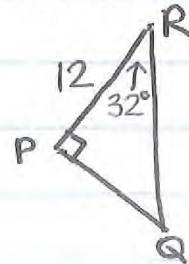
$\sin N \cong$  \_\_\_\_\_  
 $\cos N \cong$  \_\_\_\_\_

Show work for \*4-5.

④ Find  $m\angle P$ .



⑤ Find  $m\widehat{PQ}$ .



⑥ In right triangle ABC,  $\angle A$  and  $\angle B$  are complementary angles. The value of  $\cos A$  is  $\frac{5}{13}$ . What is the value of  $\sin B$ ?

⑦ In right triangle HJK,  $\angle J$  is a right angle and  $\tan \angle H = 1$ . Which statement about  $\triangle HJK$  must be true?

A.  $\sin \angle H = \frac{1}{2}$

C.  $\sin \angle H = \cos \angle H$

B.  $\sin \angle H = 1$

D.  $\sin \angle H = \frac{1}{\cos \angle H}$

draw a picture and show your work for #8-9.

⑧ A 12-foot ladder is leaning against a building at a  $75^\circ$  angle with the ground. How high does the ladder reach up the side of the building?

⑨ A hot air balloon is 1,200 feet above the ground. The angle of depression from the basket of the hot air balloon to the base of a monument is  $54^\circ$ . Find the distance from the basket to the base of the monument.



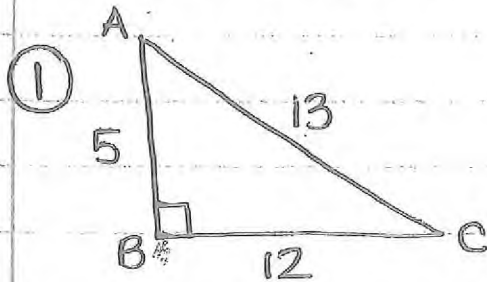
Key

# EOC Review \* 4 (Unit 2) 20pts

[DUE on Fri. Feb. 12 - NO LATE WORK]

\* Go to [cornwellnhs.weebly.com](http://cornwellnhs.weebly.com), "classroom Resources", "Unit 2" for notes to help in remembering the unit 2 concepts. \*

3pt



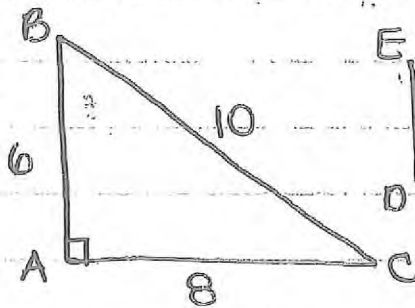
i)  $\tan A = \frac{12}{5}$   
 ii)  $\cos C = \frac{12}{13}$   
 iii)  $\sin C = \frac{5}{13}$

} write your answer as a fraction.

3pt

②  $\triangle ABC \sim \triangle DEF$

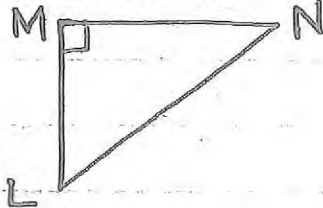
write your answer as a decimal.



i)  $\sin F = \frac{6}{10} = 0.6$   
 ii)  $\tan E = \frac{8}{6} = 1.3$   
 iii)  $\cos E = \frac{6}{10} = 0.6$

2pt

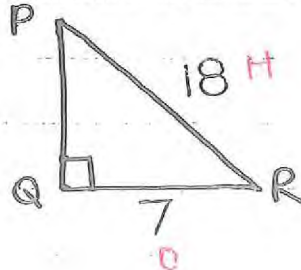
③ Consider  $\triangle LMN$ .



$\sin N \cong \frac{\cos L}{1}$   
 $\cos N \cong \frac{\sin L}{1}$

2pt

④ Find  $m\angle P$ .



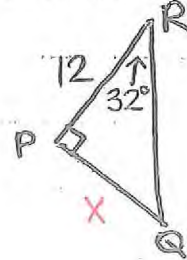
$$\sin P = \frac{7}{18}$$

$$P = \sin^{-1}\left(\frac{7}{18}\right)$$

$$P = 22.9^\circ$$

2pt

⑤ Find  $m\angle P$ .

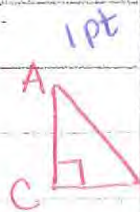


$$12 \cdot \tan 32^\circ = \frac{X}{12} \cdot 12$$

$$12 \cdot \tan 32^\circ = X$$

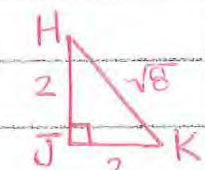
$$7.5 = X$$

Show work for \*4-5.



⑥ In right triangle ABC,  $\angle A$  and  $\angle B$  are complementary angles. The value of  $\cos A$  is  $\frac{5}{13}$ . What is the value of  $\sin B$ ?  $\frac{5}{13}$

1 pt



$\tan H = \frac{2}{2} = 1$

$2^2 + 2^2 = x^2$   
 $8 = x^2$   $x = \sqrt{8}$

draw a picture and show your work for #8-9.

⑦ In right triangle HJK,  $\angle J$  is a right angle and  $\tan \angle H = 1$ . Which statement about  $\triangle HJK$  must be true?

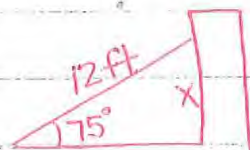
A.  $\sin \angle H = \frac{1}{2}$

B.  $\sin \angle H = 1$

C.  $\sin \angle H = \cos \angle H$

D.  $\sin \angle H = \frac{1}{\cos \angle H}$

⑧ A 12-foot ladder is leaning against a building at a  $75^\circ$  angle with the ground. How high does the ladder reach up the side of the building?



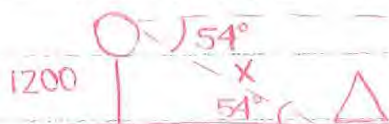
$12 \cdot \sin 75^\circ = \frac{x}{12} \cdot 12$

$12 \cdot \sin 75^\circ = x$

$11.6 = x$

3 pt

⑨ A hot air balloon is 1,200 feet above the ground. The angle of depression from the basket of the hot air balloon to the base of a monument is  $54^\circ$ . Find the distance from the basket to the base of the monument.



$\sin 54^\circ = \frac{1200}{x}$

$x \cdot \sin 54^\circ = 1200$

$x = \frac{1200}{\sin 54^\circ} = 1483.3$

students may do:



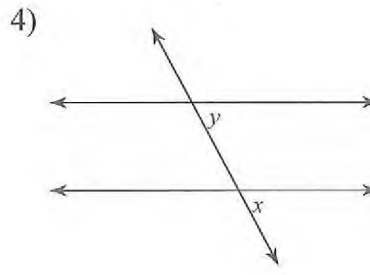
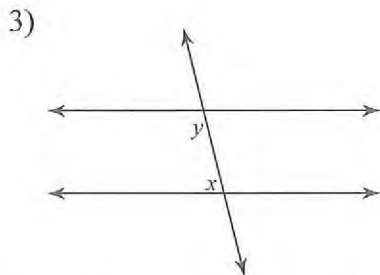
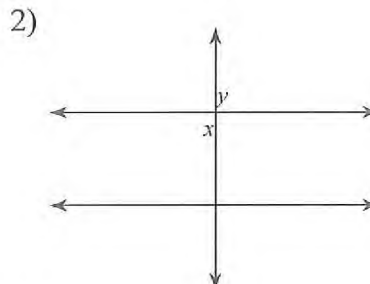
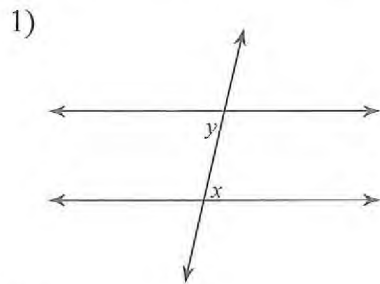
$\tan 54^\circ = \frac{1200}{x}$

$x \cdot \tan 54^\circ = 1200$

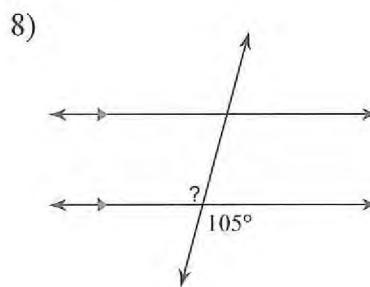
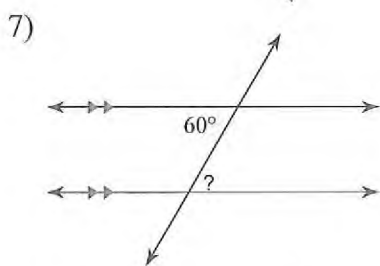
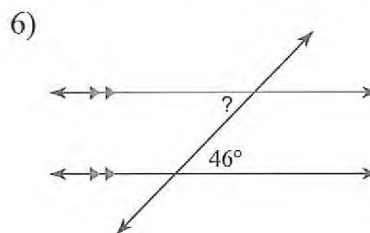
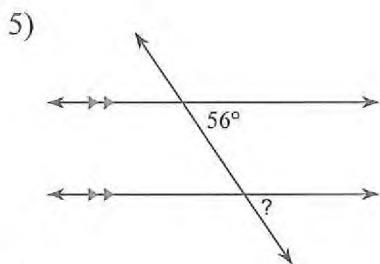
$x = \frac{1200}{\tan 54^\circ} = 871.9$

EOC Review #5 (unit 1)

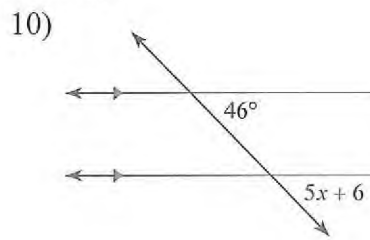
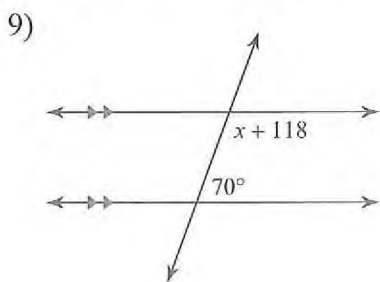
Identify each pair of angles as corresponding, alternate interior, same-side interior, or vertical.



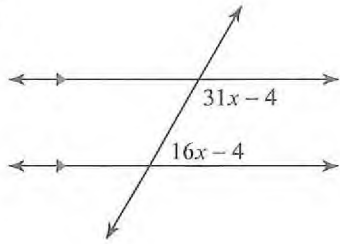
Find the measure of each angle indicated. Tell what theorem you used.



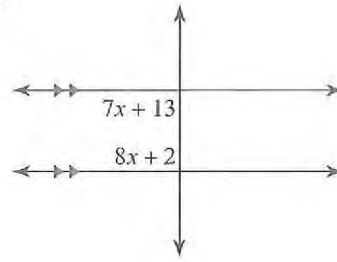
Solve for x. Tell what theorem you used.



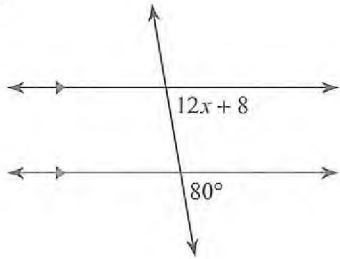
11)



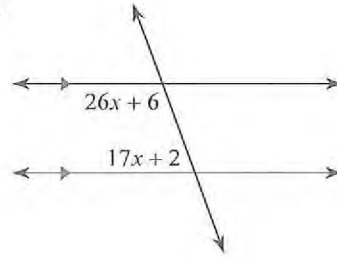
12)



13)

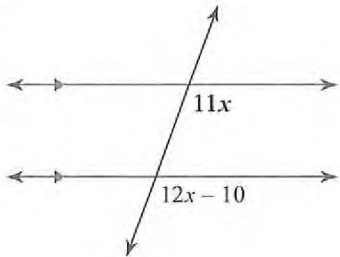


14)

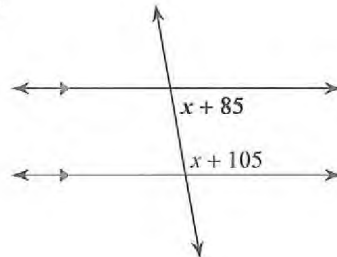


**Find the measure of the angle indicated in bold.**

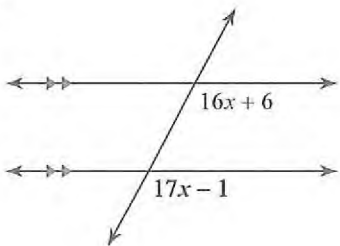
15)



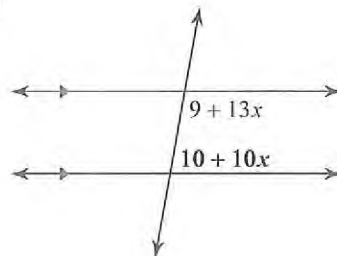
16)



17)



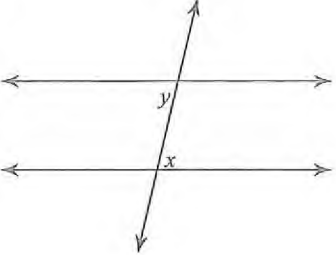
18)

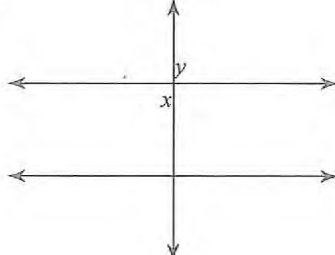


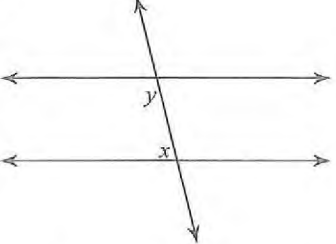
42 pts  
21 pts

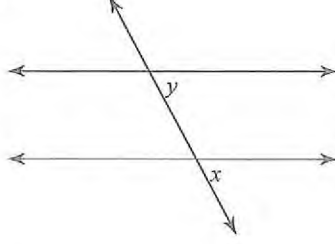
# EOC Review #5 (Unit 1)

Identify each pair of angles as corresponding, alternate interior, same-side interior, or vertical. *1 pt each*

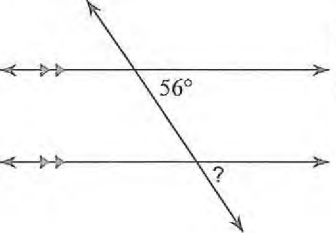
1)  **Alternate Interior**

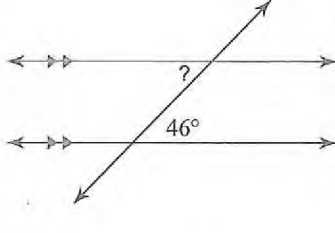
2)  **vertical**

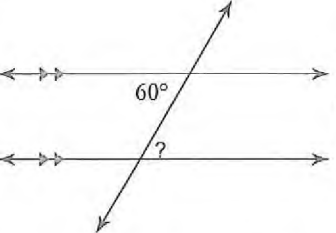
3)  **same-side Interior**

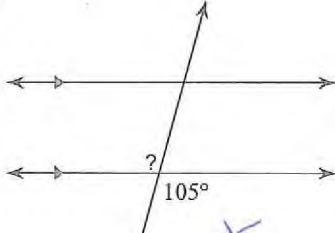
4)  **Corresponding**

Find the measure of each angle indicated. Tell what theorem you used. *2 pt each*

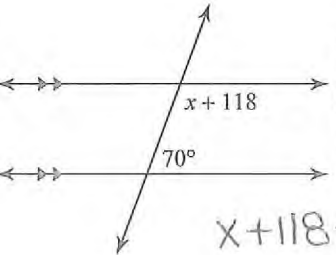
5)  **56°**  
**Corresponding Angles Thm**

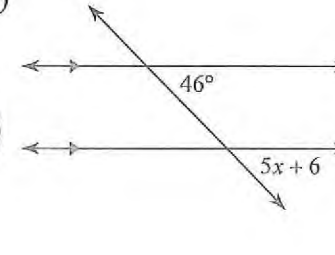
6)  **46°**  
**Alternate Interior Angles Thm**

7)  **60°**  
**Alternate Interior Angles Thm**

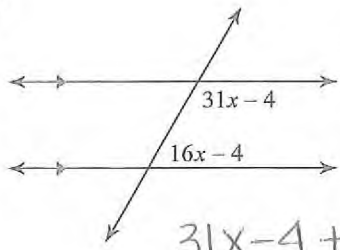
8)  **105°**  
**Vertical Angles Thm**

Solve for x. Tell what theorem you used. *3 pt each*

9)  **same-side Interior Angles postulate**  
 $x + 118 + 70 = 180$   
 $x + 188 = 180$   
**x = -8**

10)  **Corresponding Angles Thm**  
 $46 = 5x + 6$   
 $40 = 5x$   
**8 = x**

11)

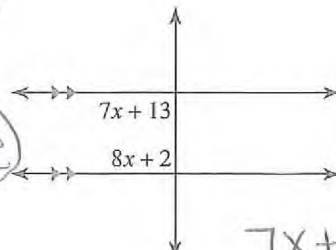


Same-Side  
Interior  
Angles Postulate

$$\begin{aligned} 31x-4 + 16x-4 &= 180 \\ 47x-8 &= 180 \\ 47x &= 188 \end{aligned}$$

$$x = 4$$

12)

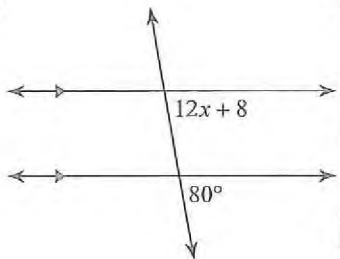


Same-Side  
Interior  
Angles Postulate

$$\begin{aligned} 7x+13 + 8x+2 &= 180 \\ 15x+15 &= 180 \\ 15x &= 165 \end{aligned}$$

$$x = 11$$

13)

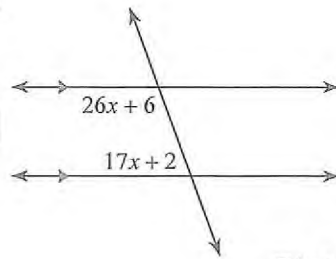


Corresponding  
Angles Theorem

$$\begin{aligned} 12x+8 &= 80 \\ 12x &= 72 \end{aligned}$$

$$x = 6$$

14)



Same-Side  
Interior Angles  
Postulate

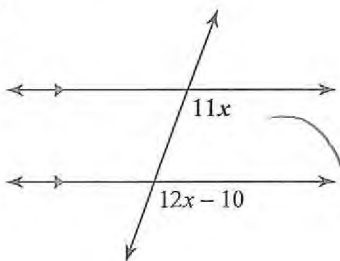
$$\begin{aligned} 26x+6 + 17x+2 &= 180 \\ 43x+8 &= 180 \\ 43x &= 172 \end{aligned}$$

$$x = 4$$

Find the measure of the angle indicated in bold.

3 pt each

15)



$$11x = 12x - 10$$

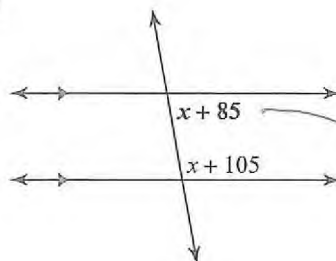
$$-x = -10$$

$$x = 10$$

$$11(10)$$

$$\mathbf{110^\circ}$$

16)



$$x+85 + x+105 = 180$$

$$2x+190 = 180$$

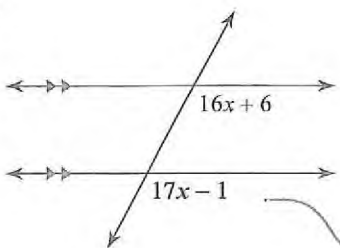
$$2x = -10$$

$$x = -5$$

$$-5+85$$

$$\mathbf{80^\circ}$$

17)



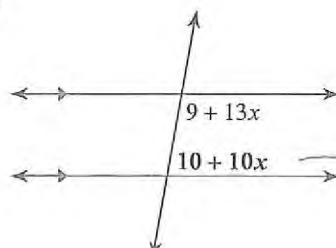
$$16x+6 = 17x-1$$

$$7 = x$$

$$17(7)-1$$

$$\mathbf{118^\circ}$$

18)



$$9+13x + 10+10x = 180$$

$$23x+19 = 180$$

$$23x = 161$$

$$x = 7$$

$$10+10(7)$$

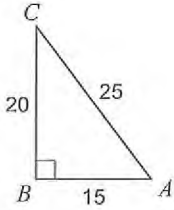
$$\mathbf{80^\circ}$$

\*Your calculator needs to be in DEGREES.\*

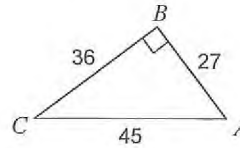
EOC Review #6

Find the value of each trigonometric ratio. (Write your answer as a fraction.)

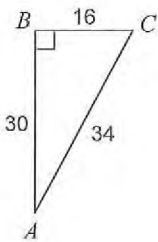
1)  $\cos A$



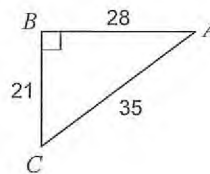
2)  $\sin C$



3)  $\tan C$

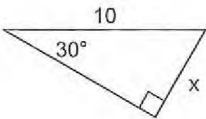


4)  $\cos C$

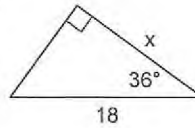


Find the missing side. Round to the nearest tenth. (Write your answer as a decimal.)

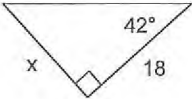
5)



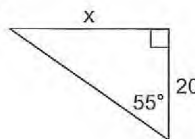
6)



7)

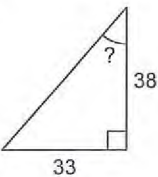


8)

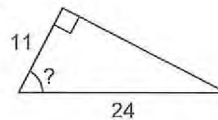


Find the measure of the indicated angle to the nearest degree.

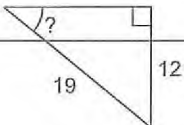
9)



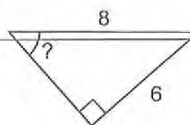
10)



11)



12)



DUE BY FRI. FEB. 26

\*Your calculator needs to be in DEGREES.\*

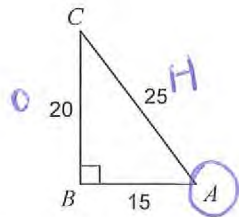
Name Key

EOC Review #6

20 pts

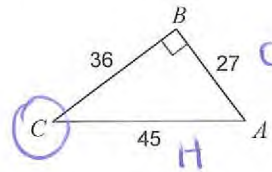
1pt Find the value of each trigonometric ratio. (Write your answer as a fraction.)

1)  $\cos A$



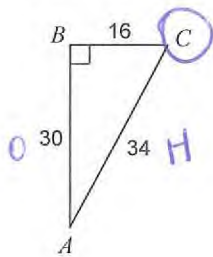
$$\frac{15}{25}$$

2)  $\sin C$



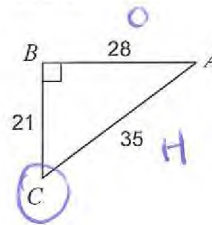
$$\frac{27}{45}$$

3)  $\tan C$



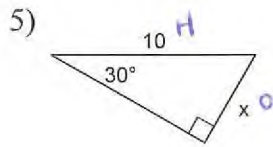
$$\frac{30}{16}$$

4)  $\cos C$



$$\frac{21}{35}$$

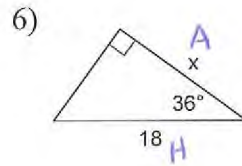
2pt Find the missing side. Round to the nearest tenth. (Write your answer as a decimal.)



$$\sin 30^\circ = \frac{x}{10}$$

$$10 \cdot \sin 30^\circ = x$$

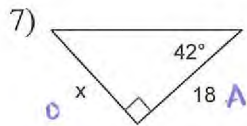
$$5 = x$$



$$\cos 36^\circ = \frac{x}{18}$$

$$18 \cdot \cos 36^\circ = x$$

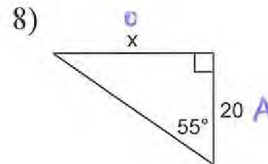
$$14.6 = x$$



$$\tan 42^\circ = \frac{x}{18}$$

$$18 \cdot \tan 42^\circ = x$$

$$16.2 = x$$

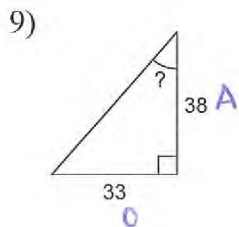


$$\tan 55^\circ = \frac{x}{20}$$

$$20 \cdot \tan 55^\circ = x$$

$$28.6 = x$$

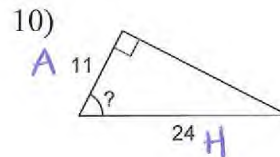
2pt Find the measure of the indicated angle to the nearest degree.



$$\tan ? = \frac{33}{38}$$

$$? = \tan^{-1}\left(\frac{33}{38}\right)$$

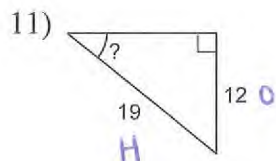
$$? = 41^\circ$$



$$\cos ? = \frac{11}{24}$$

$$? = \cos^{-1}\left(\frac{11}{24}\right)$$

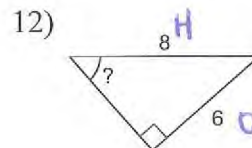
$$? = 63^\circ$$



$$\sin ? = \frac{12}{19}$$

$$? = \sin^{-1}\left(\frac{12}{19}\right)$$

$$? = 39^\circ$$



$$\sin ? = \frac{6}{8}$$

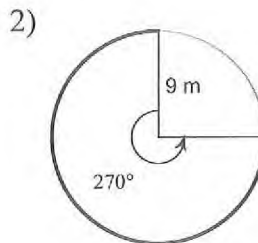
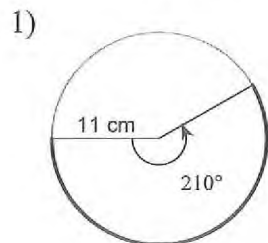
$$? = \sin^{-1}\left(\frac{6}{8}\right)$$

$$? = 49^\circ$$

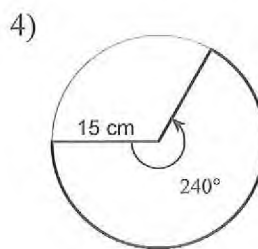
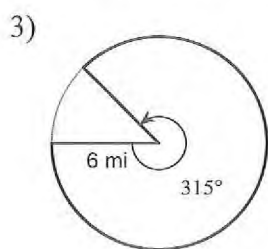


EOC Review #7

Find the length of each arc. Round your answers to the nearest tenth.

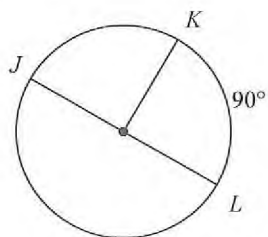


Find the area of each sector. Round your answers to the nearest tenth.

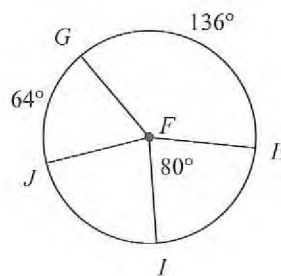


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

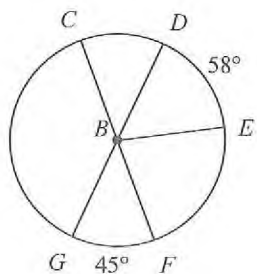
5)  $m\widehat{LJK}$



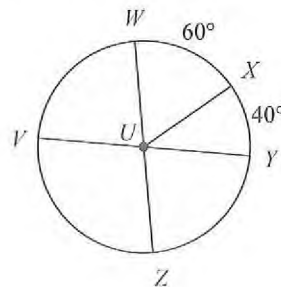
6)  $m\angle IFJ$



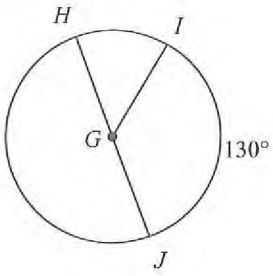
7)  $m\angle DBF$



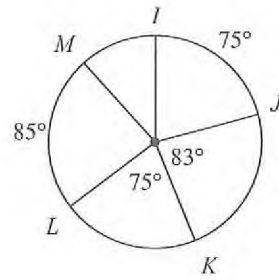
8)  $m\angle VUW$



9)  $m\angle HGI$

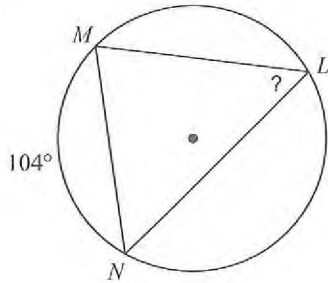


10)  $m\widehat{LIK}$

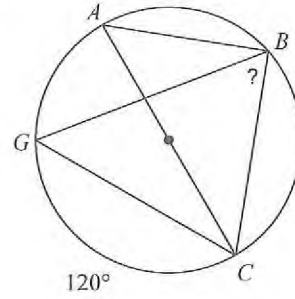


**Find the measure of the arc or angle indicated.**

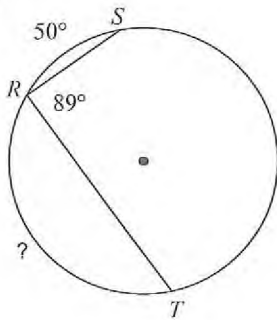
11)



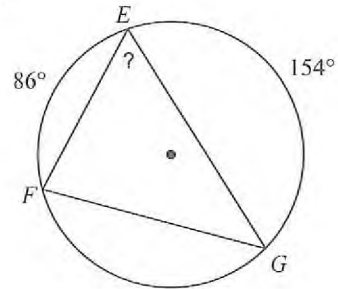
12)



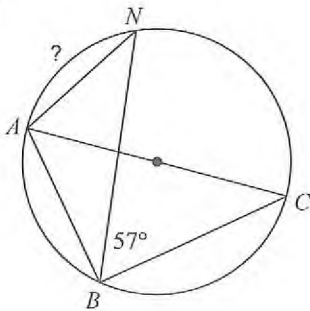
13)



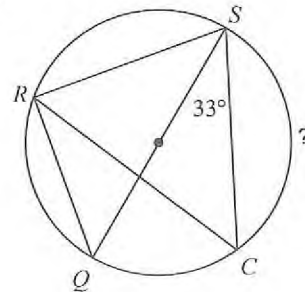
14)



15)



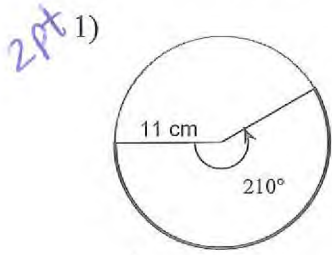
16)



EOC Review #7

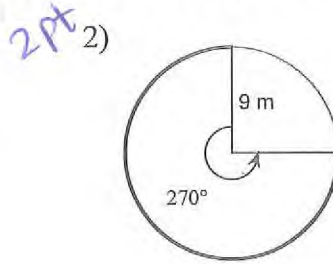
20 pts

Find the length of each arc. Round your answers to the nearest tenth.



$$\frac{210}{360} \cdot 2\pi \cdot 11$$

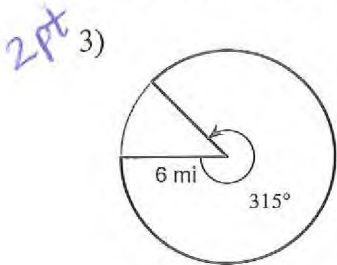
40.3



$$\frac{270}{360} \cdot 2\pi \cdot 9$$

42.4

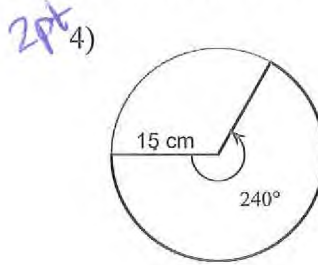
Find the area of each sector. Round your answers to the nearest tenth.



$$\frac{315}{360} \cdot \pi \cdot 6^2$$

98.96

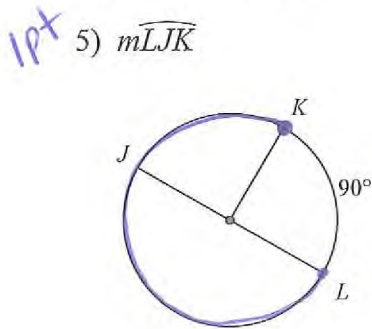
99.0



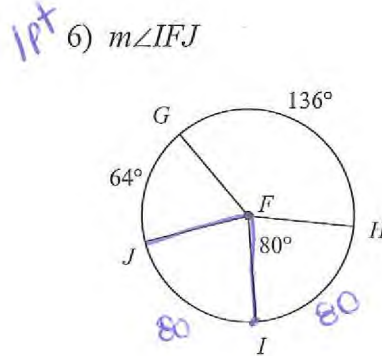
$$\frac{240}{360} \cdot \pi \cdot 15^2$$

471.2

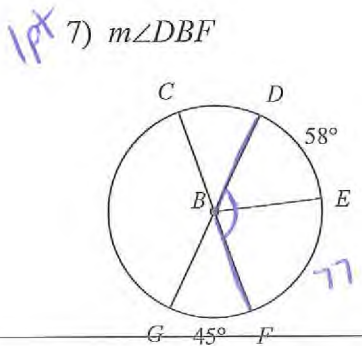
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.



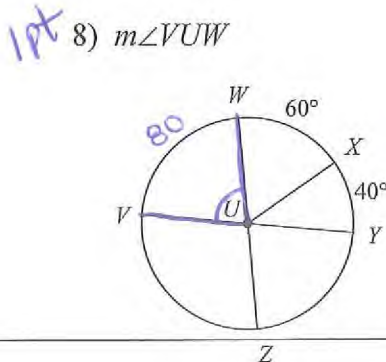
270°



80°

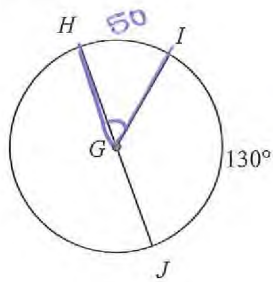


135°



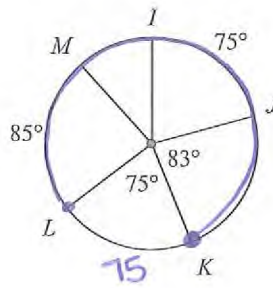
80°

1pt 9)  $m\angle HGI$



50°

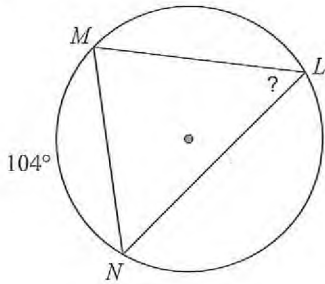
1pt 10)  $m\widehat{LIK}$



285°

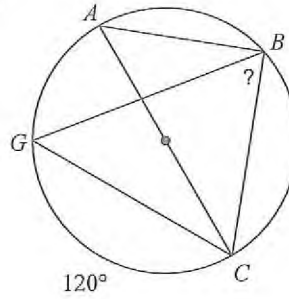
Find the measure of the arc or angle indicated.

1pt 11)



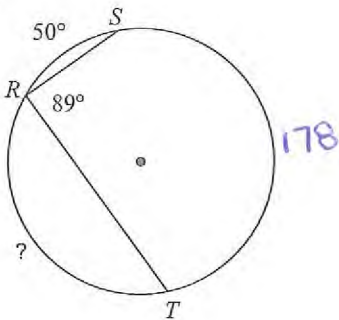
52°

1pt 12)



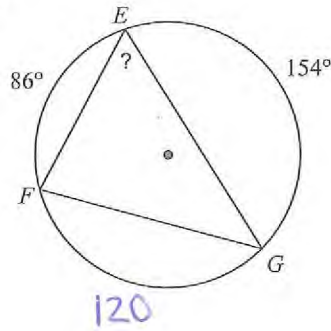
60°

1pt 13)



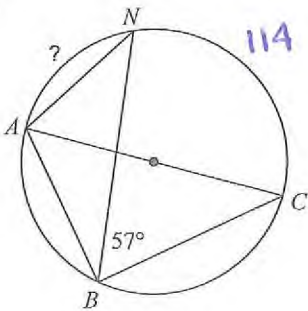
132°

1pt 14)



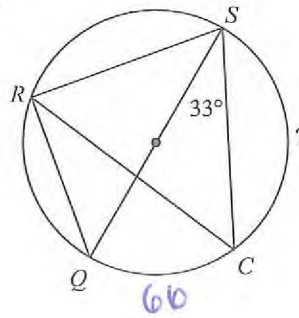
60°

1pt 15)



66°

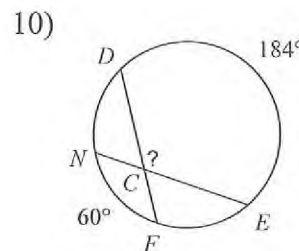
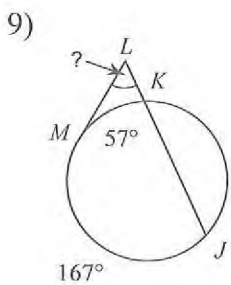
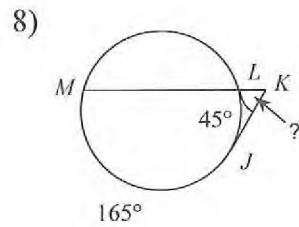
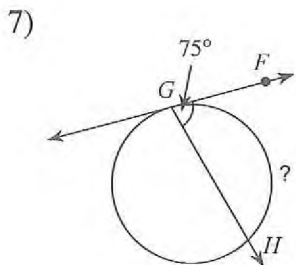
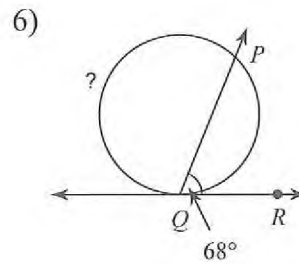
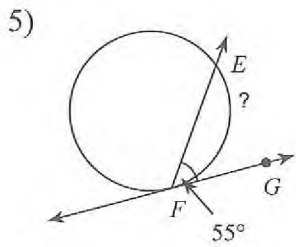
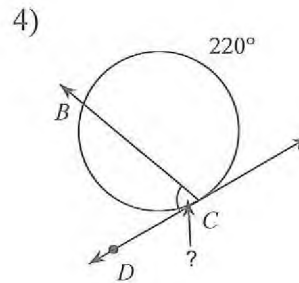
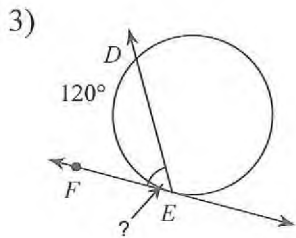
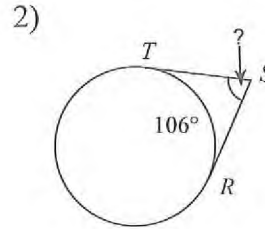
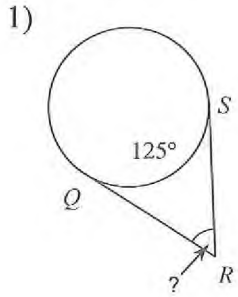
1pt 16)



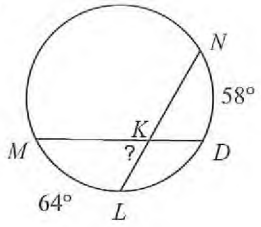
114°

EOC Review #8 (Due by Fri. Mar. 11)

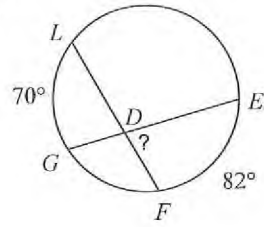
Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.



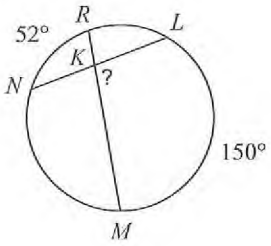
11)



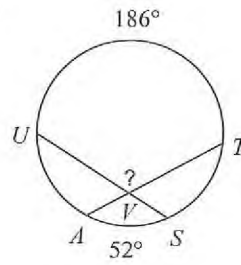
12)



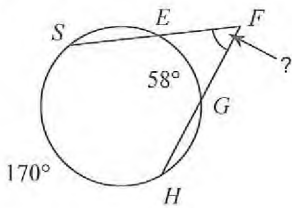
13)



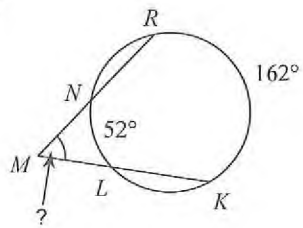
14)



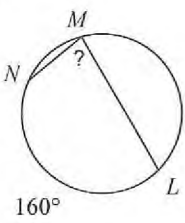
15)



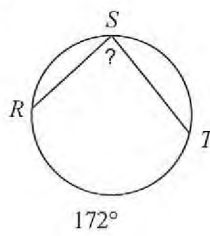
16)



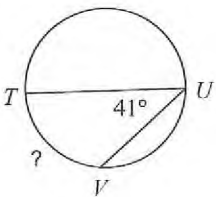
17)



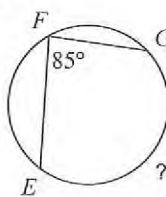
18)



19)



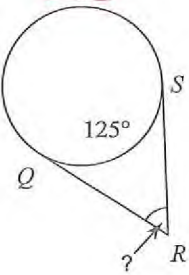
20)

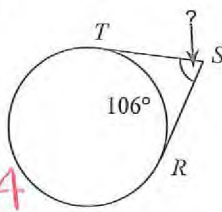


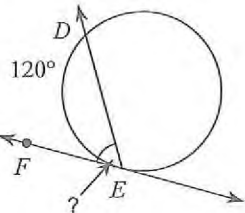
EOC Review #8 (Due by Fri. Mar. 11)

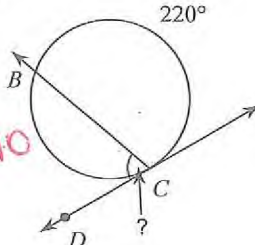
WORTH 20 PTS

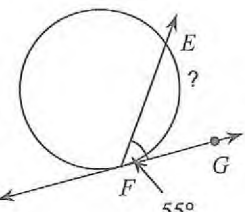
Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

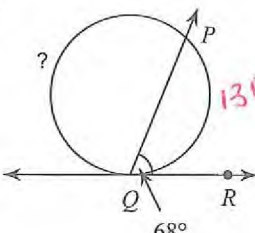
1)  $235$   
  
 $\frac{1}{2}(235 - 125)$   
 55

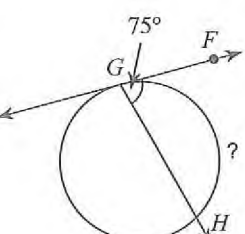
2)  $254$   
  
 $\frac{1}{2}(254 - 106)$   
 74

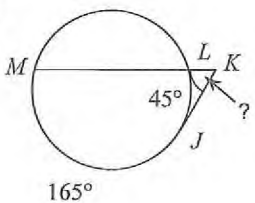
3)  $120$   
  
 60

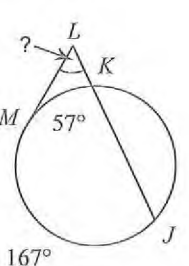
4)  $140$   
  
 70

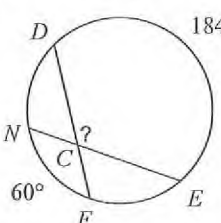
5)  $55$   
  
 110

6)  $136$   
  
 224

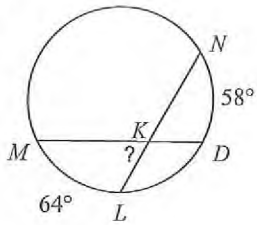
7)  $75$   
  
 150

8)  $165$   
  
 $\frac{1}{2}(165 - 45)$   
 60

9)  $167$   
  
 $\frac{1}{2}(167 - 57)$   
 55

10)  $184$   
  
 $\frac{1}{2}(184 + 60)$   
 122

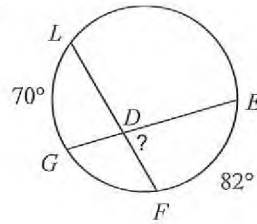
11)



$$\frac{1}{2}(58+64)$$

(61)

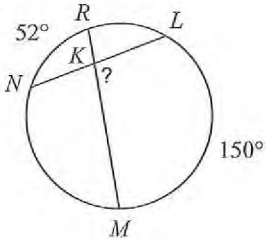
12)



$$\frac{1}{2}(70+82)$$

(76)

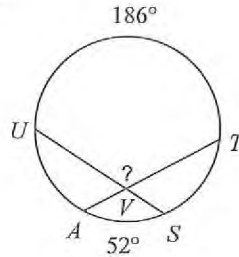
13)



$$\frac{1}{2}(52+150)$$

(101)

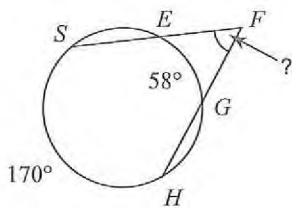
14)



$$\frac{1}{2}(186+52)$$

(119)

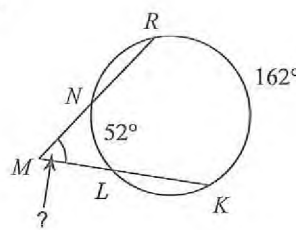
15)



$$\frac{1}{2}(170-58)$$

(56)

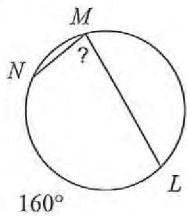
16)



$$\frac{1}{2}(162-52)$$

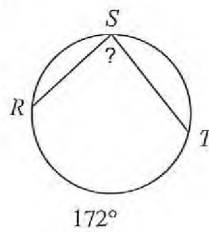
(55)

17)



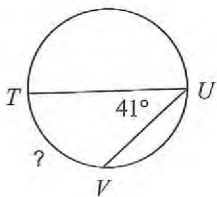
(80)

18)



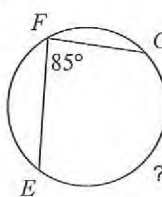
(86)

19)



(82)

20)



(170)



Due by Fri. Apr. 1

Name \_\_\_\_\_

### EOC Review #9 (Unit 4)

**Simplify each expression. Show all of your work!**

1)  $(5 - 2a) + (6 - 8a)$

2)  $(4x^4 - 5x + 4x^3) + (7x + 5x^4)$

3)  $(5n + 4n^3 + 5n^4) - (4n^4 + 7n)$

4)  $(5k + 8k^4 - 4) + (3k^2 + 2 + 6k)$

5)  $(x - 5x^3 + x^2) - (7 + 3x^3 + x)$

6)  $(4x^2 + 1 - 8x) - (5x - 6 - 6x^2)$

**Find each product. Show all of your work!**

7)  $(4v - 6)(6v - 3)$

8)  $(2x - 5)(2x^2 + 4x + 6)$

$$9) (6n + 8)(7n^2 + 3n + 1)$$

$$10) (3n^2 + 5n + 3)(4n^2 + 4n + 3)$$

**Simplify. Show all of your work!**

$$11) \sqrt{180}$$

$$12) \sqrt{150}$$

$$13) \sqrt{18m^3}$$

$$14) \sqrt{72x}$$

$$15) \sqrt{20xy^3}$$

$$16) \sqrt{125x^3y^4}$$

Due by Fri. Apr. 1

110 pts

Name Key

### EOC Review #9 (Unit 4)

Simplify each expression. Show all of your work!

1)  $(5 - 2a) + (6 - 8a)$

$$5 - 2a + 6 - 8a$$

$$\underline{-10a + 11}$$

2)  $(4x^4 - 5x + 4x^3) + (7x + 5x^4)$

$$\underline{4x^4} - \underline{5x} + \underline{4x^3} + \underline{7x} + \underline{5x^4}$$

$$\underline{9x^4 + 4x^3 + 2x}$$

3)  $(5n + 4n^3 + 5n^4) - (4n^4 + 7n)$

$$\underline{5n} + \underline{4n^3} + \underline{5n^4} - \underline{4n^4} - \underline{7n}$$

$$\underline{n^4 + 4n^3 - 2n}$$

4)  $(5k + 8k^4 - 4) + (3k^2 + 2 + 6k)$

$$\underline{5k} + \underline{8k^4} - \underline{4} + \underline{3k^2} + \underline{2} + \underline{6k}$$

$$\underline{8k^4 + 3k^2 + 11k - 2}$$

5)  $(x - 5x^3 + x^2) - (7 + 3x^3 + x)$

$$\underline{x} - \underline{5x^3} + \underline{x^2} - \underline{7} - \underline{3x^3} - \underline{x}$$

$$\underline{-8x^3 + x^2 - 7}$$

6)  $(4x^2 + 1 - 8x) - (5x - 6 - 6x^2)$

$$\underline{4x^2} + \underline{1} - \underline{8x} - \underline{5x} + \underline{6} + \underline{6x^2}$$

$$\underline{10x^2 - 13x + 7}$$

Find each product. Show all of your work!

7)  $(4v - 6)(6v - 3)$

$$24v^2 - 12v - 36v + 18$$

$$\underline{24v^2 - 48v + 18}$$

8)  $(2x - 5)(2x^2 + 4x + 6)$

$$4x^3 + 8x^2 + 12x - 10x^2 - 20x - 30$$

$$\underline{4x^3 - 2x^2 - 8x - 30}$$

$$9) (6n + 8)(7n^2 + 3n + 1)$$

$$42n^3 + 18n^2 + 6n + 56n^2 + 24n + 8$$

$$\boxed{42n^3 + 74n^2 + 30n + 8}$$

$$10) (3n^2 + 5n + 3)(4n^2 + 4n + 3)$$

	$4n^2$	$4n$	$3$
$3n^2$	$12n^4$	$12n^3$	$9n^2$
$5n$	$20n^3$	$20n^2$	$15n$
$3$	$12n^2$	$12n$	$9$

$$\boxed{12n^4 + 32n^3 + 41n^2 + 27n + 9}$$

Simplify. Show all of your work!

$$11) \sqrt{180}$$

- 1-180
- 2-90
- 3-60
- 4-45
- 5-36
- 6-30
- 9-20

$$\sqrt{5} \cdot \sqrt{36}$$

$$\sqrt{5} \cdot 6$$

$$\boxed{6\sqrt{5}}$$

$$12) \sqrt{150}$$

- 1-150
- 2-75
- 3-50
- 5-30
- 6-25
- 10-15

$$\sqrt{6} \cdot \sqrt{25}$$

$$\sqrt{6} \cdot 5$$

$$\boxed{5\sqrt{6}}$$

$$13) \sqrt{18m^3}$$

$$\sqrt{18} \cdot \sqrt{m^3}$$

$$\sqrt{9} \cdot \sqrt{2} \cdot \sqrt{m^2} \cdot \sqrt{m}$$

$$3 \cdot \sqrt{2} \cdot m \cdot \sqrt{m}$$

$$\boxed{3m\sqrt{2m}}$$

$$14) \sqrt{72x}$$

$$\sqrt{72} \cdot \sqrt{x}$$

$$\sqrt{2} \cdot \sqrt{36} \cdot \sqrt{x}$$

$$\sqrt{2} \cdot 6 \cdot \sqrt{x}$$

$$\boxed{6\sqrt{2x}}$$

$$15) \sqrt{20xy^3}$$

$$\sqrt{20} \cdot \sqrt{x} \cdot \sqrt{y^3}$$

$$\sqrt{4} \cdot \sqrt{5} \cdot \sqrt{x} \cdot \sqrt{y^2} \cdot \sqrt{y}$$

$$2 \cdot \sqrt{5} \cdot \sqrt{x} \cdot y \cdot \sqrt{y}$$

$$\boxed{2y\sqrt{5xy}}$$

$$16) \sqrt{125x^3y^4}$$

$$\sqrt{125} \cdot \sqrt{x^3} \cdot \sqrt{y^4}$$

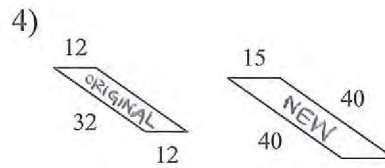
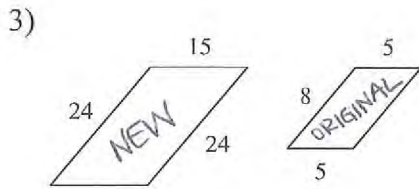
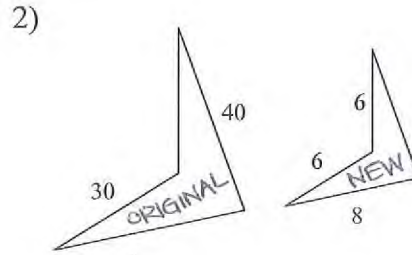
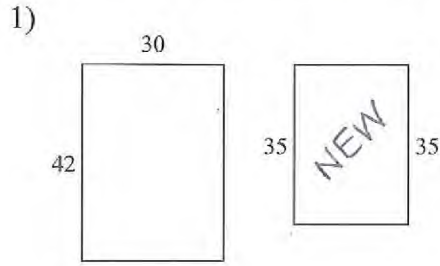
$$\sqrt{25} \cdot \sqrt{5} \cdot \sqrt{x^2} \cdot \sqrt{x} \cdot y^2$$

$$5 \cdot \sqrt{5} \cdot x \cdot \sqrt{x} \cdot y^2$$

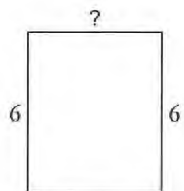
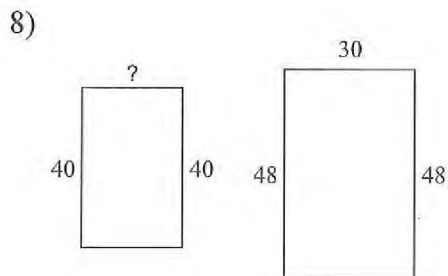
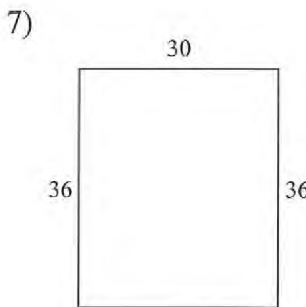
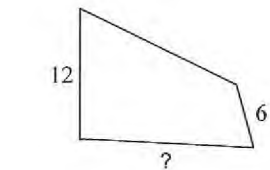
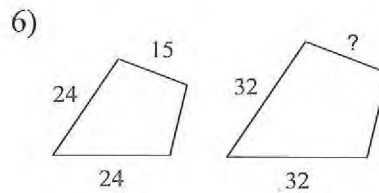
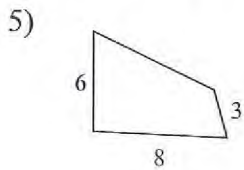
$$\boxed{5xy^2\sqrt{5x}}$$

EOC Review #10 (Unit 1: Similarity + Similar Triangles)

The polygons in each pair are similar. Find the scale factor.

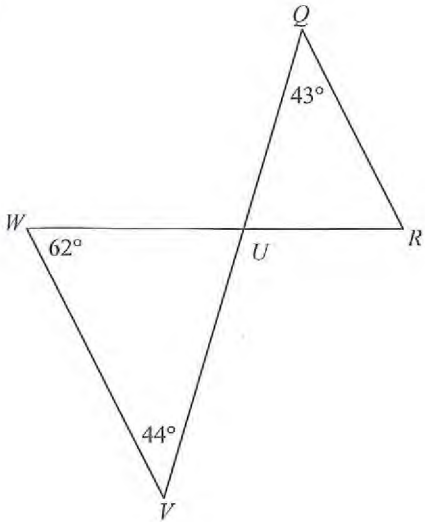


The polygons in each pair are similar. Find the missing side length.

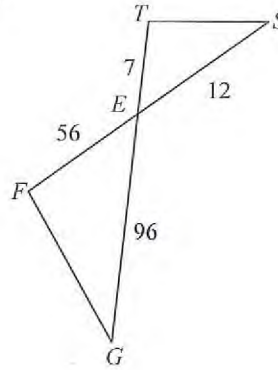


State if the triangles in each pair are similar. If so, state how you know they are similar. Show your work if necessary!

9)



10)



### UNIT 5 REVIEW

Solve each quadratic. Show ALL of your work!

11)  $y = 5(x+10)^2 - 50$

12)  $y = 15x^2 - 46x + 16$

13)  $y = 9x^2 + 6x - 20$

14)  $y = (x+4)(x+8)$

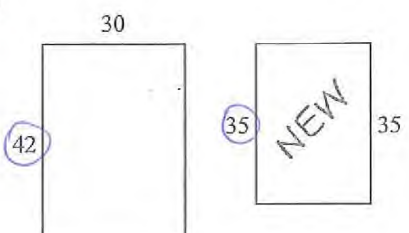
EOC Review #10 (Unit 1: Similarity + Similar Triangles)

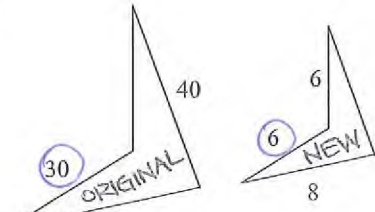
Worth 14  
(out of 20)

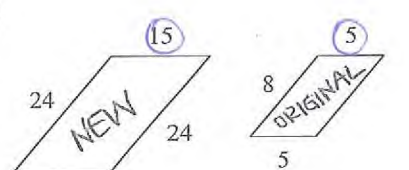
The polygons in each pair are similar. Find the scale factor.

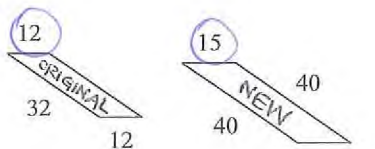
$\frac{\text{NEW}}{\text{ORIGINAL}}$

1 pt each

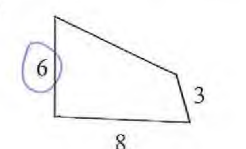
1)   $\frac{35}{42} = \frac{5}{6}$  0.83

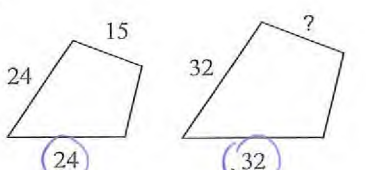
2)   $\frac{6}{30} = \frac{1}{5}$  0.2

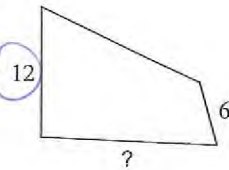
3)   $\frac{15}{5} = 3$

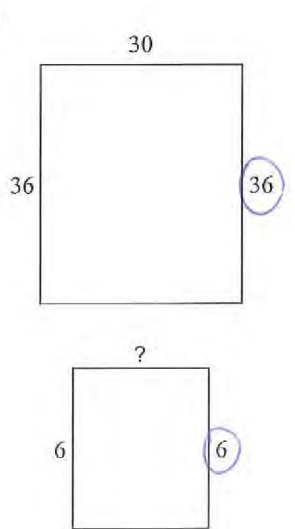
4)   $\frac{15}{12} = \frac{5}{4}$  1.25

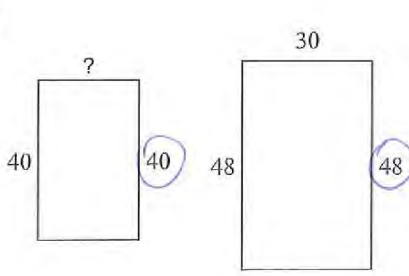
The polygons in each pair are similar. Find the missing side length.

5)   $6 \cdot 2 = 12$   
 $8 \cdot 2 = 16$

6)   $24 \cdot \frac{4}{3} = 32$   
 $15 \cdot \frac{4}{3} = 20$



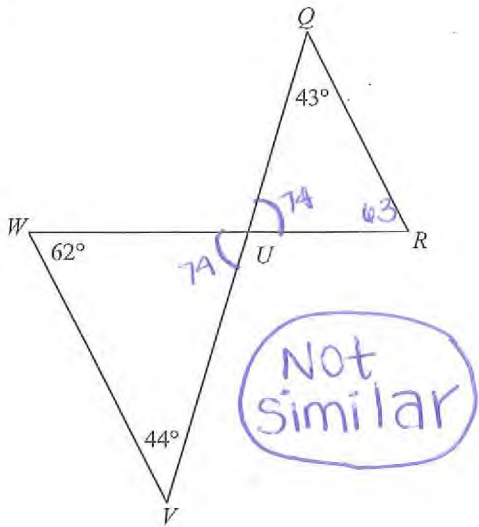
7)   $36 \cdot \frac{1}{6} = 6$   
 $30 \cdot \frac{1}{6} = 5$

8)   $40 \cdot \frac{6}{5} = 48$   
 $? \cdot \frac{6}{5} = 30$   
 $25$

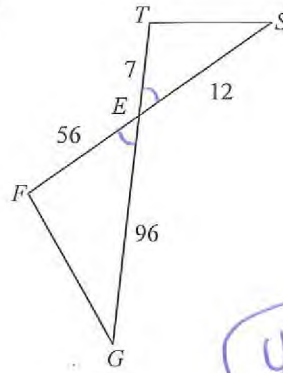
8 pts

State if the triangles in each pair are similar. If so, state how you know they are similar. Show your work if necessary!

1 pt 9)



10 pts 10)



$$\frac{7}{56} = \frac{12}{96}$$

$$.125 = .125$$

yes, SAS similarity

UNIT 5 REVIEW

Solve each quadratic. Show ALL of your work!

12 pt

$$11) y = 5(x+10)^2 - 50$$

$$0 = 5(x+10)^2 - 50$$

$$50 = 5(x+10)^2$$

$$10 = (x+10)^2$$

$$\pm\sqrt{10} = x+10$$

$$\boxed{-10 \pm \sqrt{10} = x}$$

12 pt

$$12) y = 15x^2 - 46x + 16$$

$$\frac{-(-46) \pm \sqrt{(-46)^2 - 4(15)(16)}}{2(15)}$$

$$\frac{46 \pm \sqrt{2116 - 960}}{30}$$

$$\frac{46 \pm \sqrt{1156}}{30} = \frac{46 \pm 34}{30}$$

12 pt

$$13) y = 9x^2 + 6x - 20$$

$$\frac{-6 \pm \sqrt{6^2 - 4(9)(-20)}}{2(9)}$$

$$\frac{-6 \pm \sqrt{36 + 720}}{18}$$

$$\boxed{\frac{-6 \pm \sqrt{756}}{18}}$$

12 pt

$$14) y = (x+4)(x+8)$$

$$\boxed{x = -4, -8}$$

$\frac{8}{3}, \frac{2}{5}$   
2.67, 0.4

6 pt