

UNIT 1 SO FAR GRADED PRACTICE

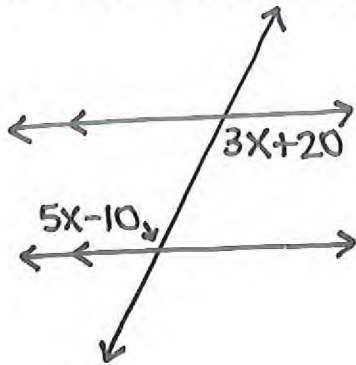
* This is due on
Mon. Sep. 21 and
will be graded for
accuracy. *

#24

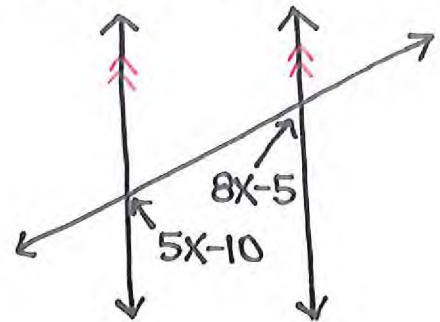
NAME _____

Solve for x . state the theorem/postulate used.

1)

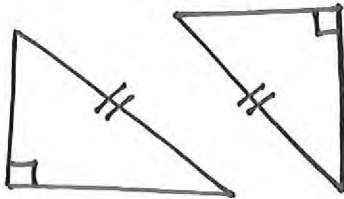


2)

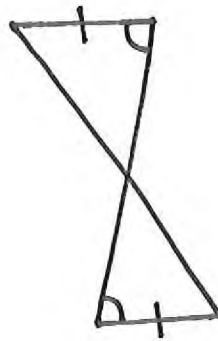


Are the triangles congruent? If so, state how you know. (Hint: Triangle Congruence Theorems.)

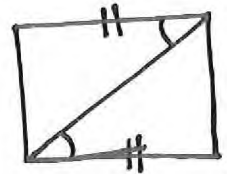
3)



4)

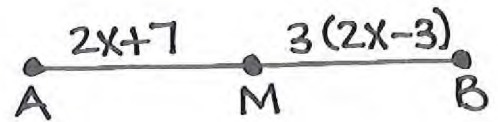


5)



Complete the proof below.

6) Given: M is the midpoint of \overline{AB}
Prove: $x = 4$



statements

Reasons

statements	Reasons

UNIT 1 SO FAR GRADED PRACTICE

* This is due on
Mon. Sep. 21 and
will be graded for
accuracy. *

#24

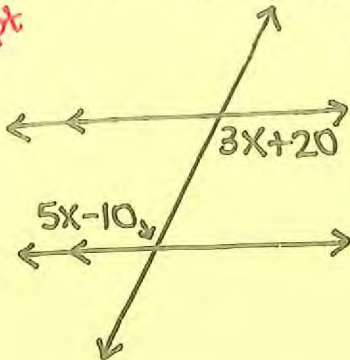
Key

NAME

3A pts

Solve for x . State the theorem/postulate used.

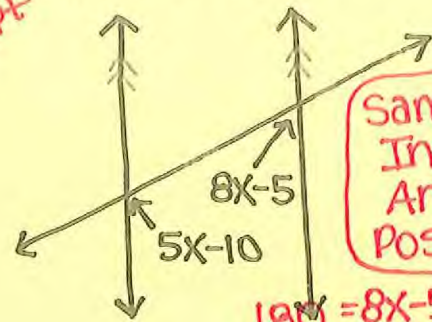
1) 3pt



Alternate
Interior
Angles
Theorem

$$\begin{aligned} 5x-10 &= 3x+20 \\ 2x-10 &= 20 \\ 2x &= 30 \\ \mathbf{x=15} \end{aligned}$$

2) 3pt



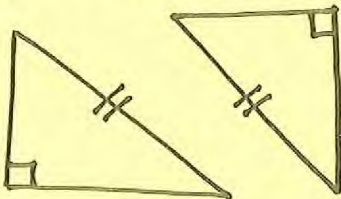
Same-side
Interior
Angles
Postulate

$$\begin{aligned} 180 &= 8x-5+5x-10 \\ 180 &= 13x-15 \\ 195 &= 13x \\ \mathbf{15=x} \end{aligned}$$

Are the triangles congruent? If so, state how you know. (Hint: Triangle Congruence Theorems.)

1pt

3)



no

1pt

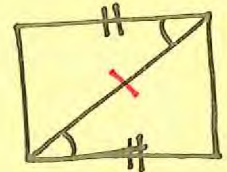
4)



yes, AAS

1pt

5)



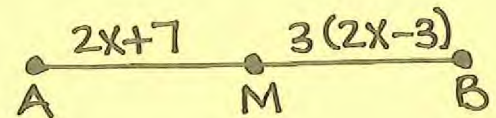
yes, SAS

8pt

Complete the proof below.

Given: M is the midpoint of \overline{AB}

Prove: $x = 4$



statements	Reasons
M is the midpoint of \overline{AB}	Given
$\overline{AM} \cong \overline{MB}$	definition of Midpoint
$2x+7 = 3(2x-3)$	Substitution Prop of =
$2x+7 = 6x-9$	Distributive Prop of =
$7 = 4x-9$	Subtraction Prop of =
$16 = 4x$	Addition Prop of =
$4 = x$	Division Prop of =
$x = 4$	Symmetric Prop of =