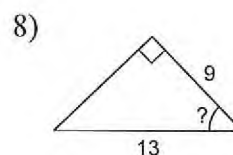
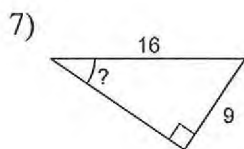
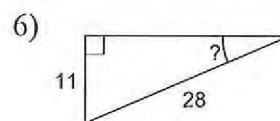
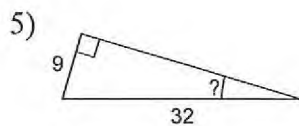
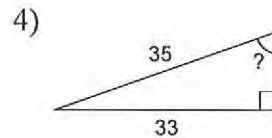
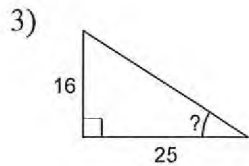
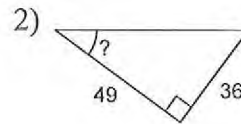
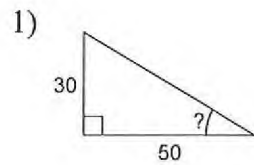


Find Missing Angle Practice

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

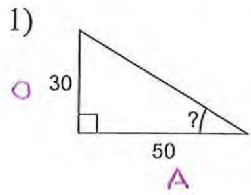


9) Nate built a skateboard ramp that covers a horizontal distance of 10 ft. The ramp rises a total of 3.5 ft. What angle does the ramp make with the ground?

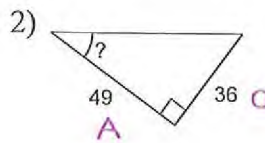
10) You lean a 30 ft ladder against a house. The base of the ladder is 6 ft away from the wall. What angle does the ladder make with the ground?

Find Missing Angle Practice

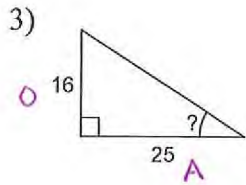
Find the measure of the indicated angle to the nearest degree.



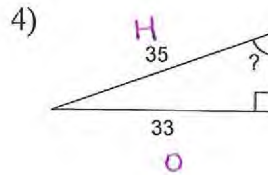
$$\begin{aligned}\tan ? &= \frac{30}{50} \\ ? &= \tan^{-1}\left(\frac{30}{50}\right) \\ &= \boxed{31^\circ}\end{aligned}$$



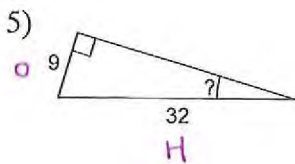
$$\begin{aligned}\tan ? &= \frac{36}{49} \\ ? &= \tan^{-1}\left(\frac{36}{49}\right) \\ &= \boxed{36^\circ}\end{aligned}$$



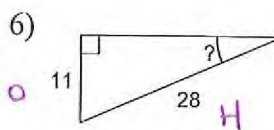
$$\begin{aligned}\tan ? &= \frac{16}{25} \\ ? &= \tan^{-1}\left(\frac{16}{25}\right) \\ &= \boxed{33^\circ}\end{aligned}$$



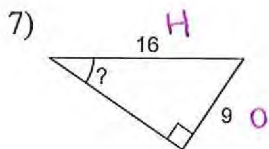
$$\begin{aligned}\sin ? &= \frac{33}{35} \\ ? &= \sin^{-1}\left(\frac{33}{35}\right) \\ &= \boxed{71^\circ}\end{aligned}$$



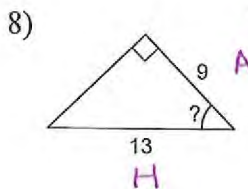
$$\begin{aligned}\sin ? &= \frac{9}{32} \\ ? &= \sin^{-1}\left(\frac{9}{32}\right) \\ &= \boxed{16^\circ}\end{aligned}$$



$$\begin{aligned}\sin ? &= \frac{11}{28} \\ ? &= \sin^{-1}\left(\frac{11}{28}\right) \\ &= \boxed{23^\circ}\end{aligned}$$

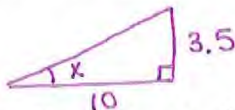


$$\begin{aligned}\sin ? &= \frac{9}{16} \\ ? &= \sin^{-1}\left(\frac{9}{16}\right) \\ &= \boxed{34^\circ}\end{aligned}$$



$$\begin{aligned}\cos ? &= \frac{9}{13} \\ ? &= \cos^{-1}\left(\frac{9}{13}\right) \\ &= \boxed{46^\circ}\end{aligned}$$

- 9) Nate built a skateboard ramp that covers a horizontal distance of 10 ft. The ramp rises a total of 3.5 ft. What angle does the ramp make with the ground?



$$\begin{aligned}\tan X &= \frac{3.5}{10} \\ X &= \tan^{-1}\left(\frac{3.5}{10}\right) = \boxed{19^\circ}\end{aligned}$$

- 10) You lean a 30 ft ladder against a house. The base of the ladder is 6 ft away from the wall. What angle does the ladder make with the ground?



$$\begin{aligned}\cos X &= \frac{6}{30} \\ X &= \cos^{-1}\left(\frac{6}{30}\right) = \boxed{78^\circ}\end{aligned}$$