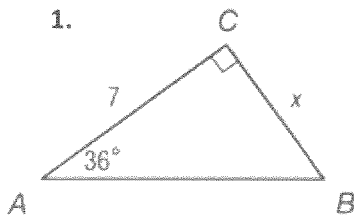


8-4 Trig. Review Homework

Name Master

Date _____ Block _____

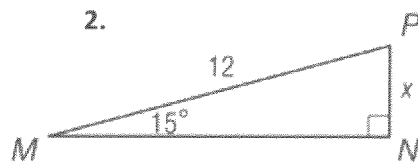
Find the value of x rounded to the nearest tenth. Write an equation for each.



$$\tan 36 = \frac{x}{7}$$

$$x \approx 5.085$$

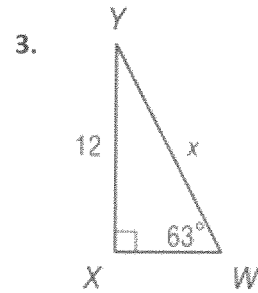
$$\approx \textcircled{5.1}$$



$$\sin 15 = \frac{x}{12}$$

$$x \approx 3.105$$

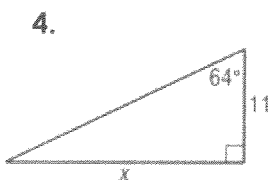
$$\approx \textcircled{3.1}$$



$$\sin 63 = \frac{12}{x}$$

$$x \approx 13.467$$

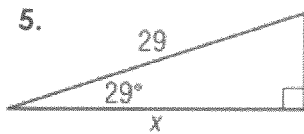
$$\approx \textcircled{13.5}$$



$$\tan 64 = \frac{x}{11}$$

$$x \approx 22.553$$

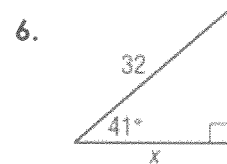
$$\approx \textcircled{22.6}$$



$$\cos 29 = \frac{x}{29}$$

$$x \approx 25.363$$

$$\approx \textcircled{25.4}$$

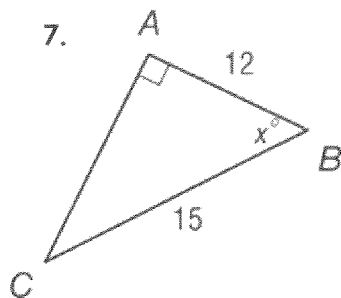


$$\cos 41 = \frac{x}{32}$$

$$x \approx 24.150$$

$$\approx \textcircled{24.2}$$

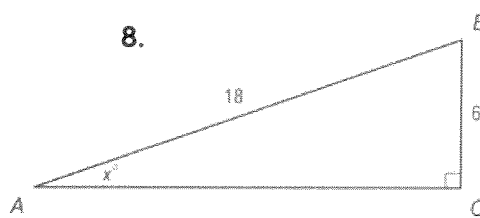
Find the value of x rounded to the nearest degree. Write an equation for each.



$$\cos x = \frac{12}{15}$$

$$x \approx 36.869$$

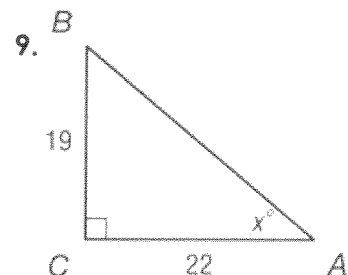
$$x \approx \textcircled{37^\circ}$$



$$\sin x = \frac{6}{18}$$

$$x \approx 19.471$$

$$x \approx \textcircled{19^\circ}$$



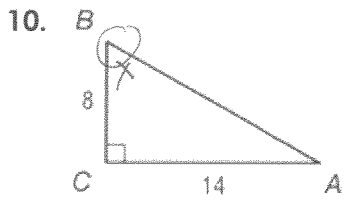
$$\tan x = \frac{19}{22}$$

$$x \approx 40.815$$

$$\approx \textcircled{41^\circ}$$



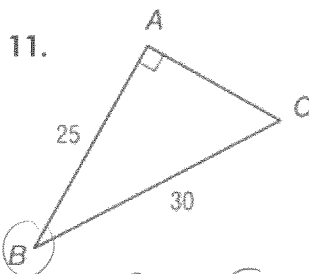
Find the measure of $\angle B$ rounded to the nearest tenth.



$$\tan B = \frac{14}{8}$$

$$B \approx 60.255$$

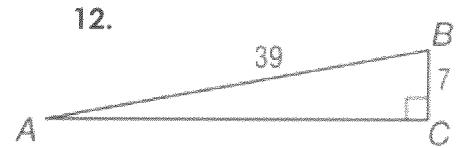
$$\approx \textcircled{60.3}$$



$$\cos B = \frac{25}{30}$$

$$B \approx 33.557$$

$$\approx \textcircled{33.6}$$



$$\cos B = \frac{7}{39}$$

$$B \approx 79.660$$

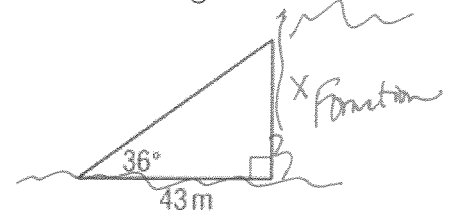
$$\approx \textcircled{79.7}$$

WORD PROBLEMS.

13. Diego used a theodolite to map a region of land for his class in geomorphology. To determine the elevation of a vertical rock formation, he measured the distance from the base of the formation to his position and the angle between the ground and the line of sight to the top of the formation. The distance was 43 meters and the angle was 36° . What is the height of the formation to the nearest meter?

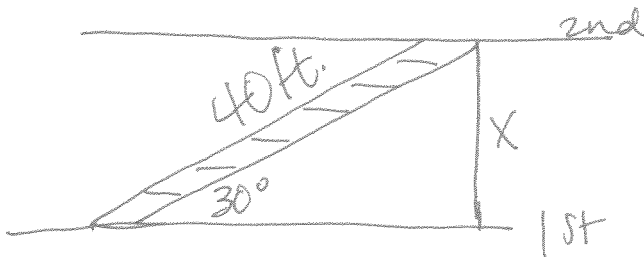
$$\tan 36 = \frac{x}{43}$$

$$x \approx 31.24$$



$\textcircled{31 \text{ meters}}$

14. A 40 foot-long escalator rises from the first floor to the second floor of a shopping mall. The escalator makes a 30° angle with the horizontal. How high above the first floor is the second floor?
HINT: Draw a picture!



$$\sin 30 = \frac{x}{40}$$

$\textcircled{x = 20 \text{ feet}}$

