

11.4 HW - Using Trig Functions to Find Missing Side Lengths and Other Functions

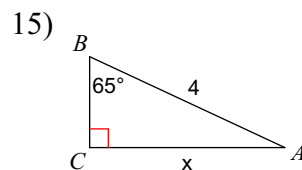
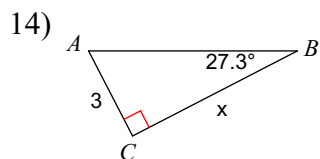
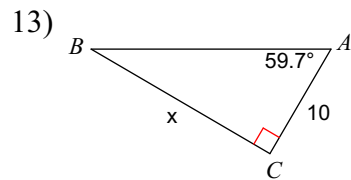
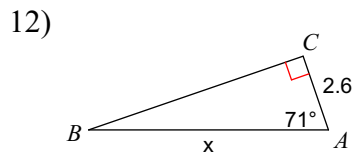
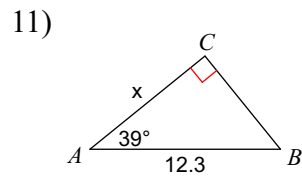
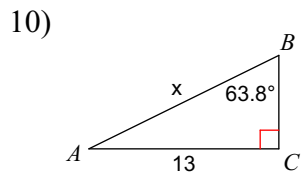
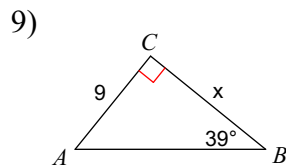
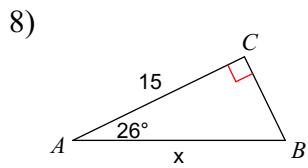
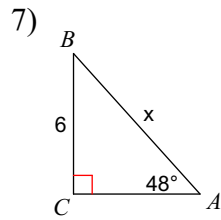
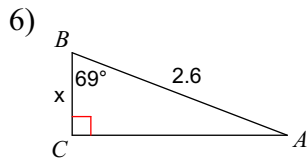
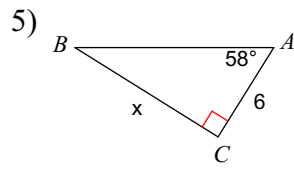
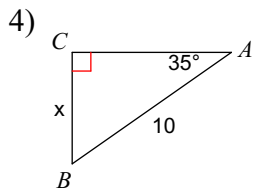
1) Draw and label a triangle to illustrate the situation. 2) Find the length of the missing side. 3) Give the values of the requested functions. 4) Give the measure of the angle to the nearest tenth of a degree.

1) $\tan \theta = \frac{40}{9}$. Find $\sin \theta$, $\cos \theta$, and the measure of θ .

2) $\cos \theta = \frac{15}{17}$. Find $\sin \theta$, $\tan \theta$, and the measure of θ .

3) $\sin \theta = \frac{12}{37}$. Find $\cos \theta$, $\tan \theta$, and the measure of θ .

Label the sides as opposite, adjacent, or hypotenuse. Write an equation involving sine, cosine, or tangent. Then, find the measure of each side indicated. Round to the nearest tenth.



Answers to 11.4 HW - Using Trig Functions to Find Missing Side Lengths and Other Functions

1) $\sin \theta = \frac{40}{41}$, $\cos \theta = \frac{9}{41}$, $\theta = 77.3^\circ$

2) $\sin \theta = \frac{8}{17}$, $\tan \theta = \frac{8}{15}$, $\theta = 28.1^\circ$

3) $\cos \theta = \frac{35}{37}$, $\tan \theta = \frac{12}{35}$, $\theta = 18.9^\circ$

4) 5.7

5) 9.6

6) 0.9

7) 8.1

8) 16.7

9) 11.1

10) 14.5

11) 9.6

12) 8

13) 17.1

14) 5.8

15) 3.6