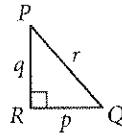# Lesson 12.1 • Trigonometric Ratios

Name _____ Period _____ Date _____
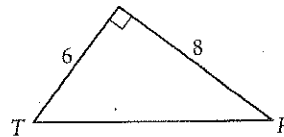
In Exercises 1–4, give each answer as a fraction in terms of p, q, and r.

1. $\sin P =$ _____

2. $\cos P =$ _____

3. $\tan P =$ _____

4. $\sin Q =$ _____

In Exercises 5–8, give each answer as a decimal accurate to the nearest 0.001.

5. $\sin T =$ _____

6. $\cos T =$ _____

7. $\tan T =$ _____

8. $\sin R =$ _____

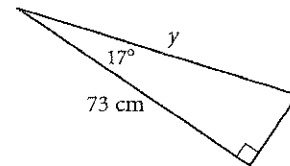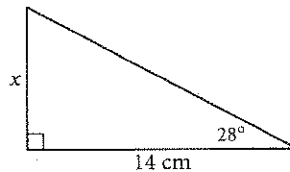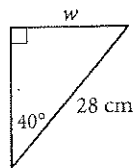For Exercises 9–11, solve for x. Express each answer accurate to the nearest 0.01.

9. $\cos 64° = \dfrac{x}{28}$

10. $\sin 24° = \dfrac{12.1}{x}$

11. $\tan 51° = \dfrac{x}{14.8}$

For Exercises 12–14, find the measure of each angle to the nearest degree.

12. $\sin A = 0.9455$

13. $\tan B = \dfrac{4}{3}$

14. $\cos C = 0.8660$

For Exercises 15–17, write a trigonometric equation you can use to solve for the unknown value. Then find the value to the nearest 0.1.

15. $w \approx$ _____

16. $x \approx$ _____

17. $y \approx$ _____

For Exercises 18–20, find the value of each unknown to the nearest degree.

18. $a \approx$ _____

19. $t \approx$ _____

20. $z \approx$ _____