

Review 8-2 to 8-3

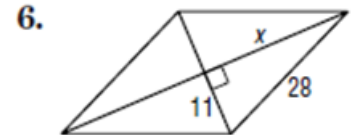
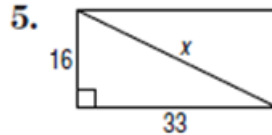
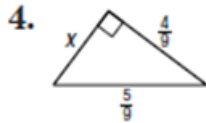
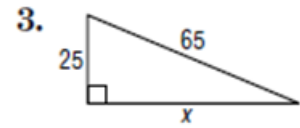
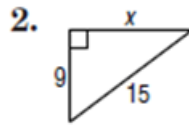
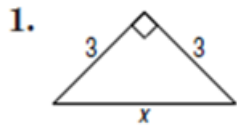
Name _____

Date _____ Block _____

Pythagorean Theorem: $a^2 + b^2 = c^2$

Find x.

Write irrational answers in simplified radical form AND in decimal form rounded to the nearest tenth.



Converse of the Pythagorean Theorem: Determine whether each set of measures can be the sides of a right, obtuse, or acute triangle. If it is a right triangle, then state whether the sides form a Pythagorean Triple.

7. 30, 40, 50

8. 20, 30, 40

9. 18, 24, 30

10. 6, 8, 9

11. $\frac{3}{7}, \frac{4}{7}, \frac{5}{7}$

12. 10, 15, 20

13. $\sqrt{5}, \sqrt{12}, \sqrt{13}$

14. $2, \sqrt{8}, \sqrt{12}$

15. 9, 40, 41

Pythagorean Triples: A family of Pythagorean triples consists of multiples of known triples. For each Pythagorean triple, find two triples in the same family.

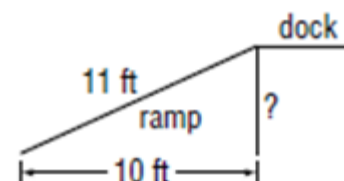
16. 3, 4, 5

17. 5, 12, 13

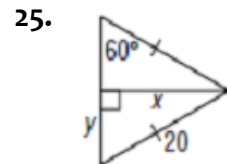
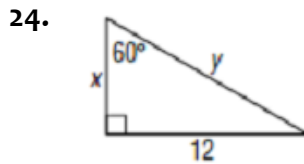
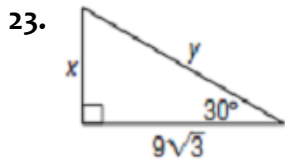
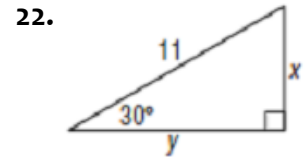
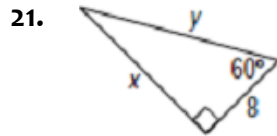
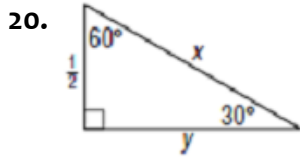
18. 7, 24, 25

Application Problem:

19. The bottom end of a ramp at a warehouse is 10 feet from the base of the main dock and is 11 feet long. How high is the dock?



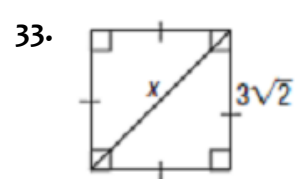
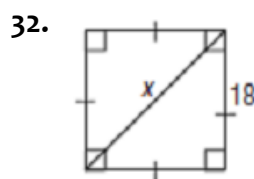
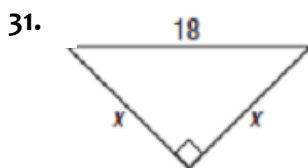
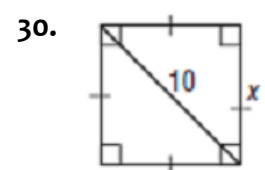
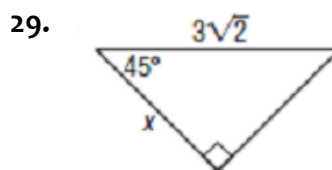
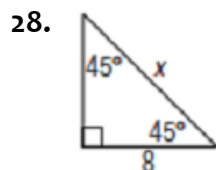
Special Right Triangles: $30^\circ - 60^\circ - 90^\circ$ Find x and y .



26. The perimeter of an equilateral triangle is 32 cm. Find the length of an altitude of the triangle to the nearest tenth of a centimeter.

27. An altitude of an equilateral triangle is 8.3 meters. Find the perimeter of the triangle to the nearest tenth of a meter.

Special Right Triangles: $45^\circ - 45^\circ - 90^\circ$ Find x .



34. Find the perimeter of a square with a diagonal that measures 12 centimeters.

35. Find the diagonal of a square with a perimeter of 20 inches.