Square Roots & Pythagorean Theorem Review

Name: _____

Find the square root(s).

1. $-\sqrt{16}$
2. $\sqrt{196}$
3. $\pm\sqrt{\frac{4}{100}}$
4. $\sqrt{\frac{16}{25}}$

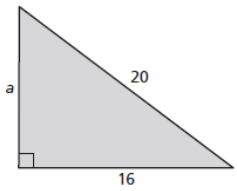
Evaluate the expression. Show your work!!

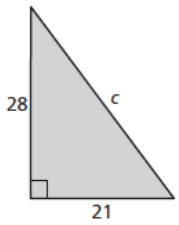
5. $8 - 2\sqrt{36}$
6. $\sqrt{0.16} + 3.8$
7. $-3\sqrt{25}$
8. $15 - 4\sqrt{64}$
9. $\sqrt{0.64} + \sqrt{1.44}$
10. $\sqrt{3.24} - 1$
11. $5\sqrt{16} - 9$
12. $3\left(\sqrt{\frac{128}{2}} - 2\right)$
13. $-4\sqrt{196} + 13$
14. $4\left(\sqrt{\frac{12}{3}} + 7\right)$

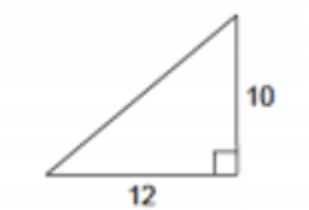
Tell whether the triangle with the given side lengths is a right triangle. Show your work!

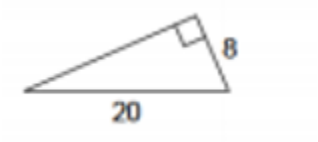
15. 20 inches, 21 inches, 29 inches
16. 7 feet, 9 feet, 15 feet

Find the missing length of the triangle. Round your answer to the nearest tenth, if necessary. Show your work!

17. 

18. 

19. 

20. 

For each of the word problems, DRAW A PICTURE & SHOW YOUR WORK!!! Round your answer to the nearest tenth, if necessary.

21. Goldmoor is 38 miles east of Silverbeach. Irongate is 26 miles south of Goldmoor. A land developer proposes building a shortcut road to directly connect Silverbeach and Irongate. What would be the length of this new road?

22. A television screen measures approximately 22 in. high and 30 in. wide. A television is advertised by giving the approximate length of the diagonal of its screen. How should this television be advertised?

23. A 10-ft ladder is placed against a wall with its base 4 ft from the wall. How high above the ground is the top of the ladder?