

LESSON

Exponents and Roots

9

Practice A: Applying the Pythagorean Theorem and its Converse

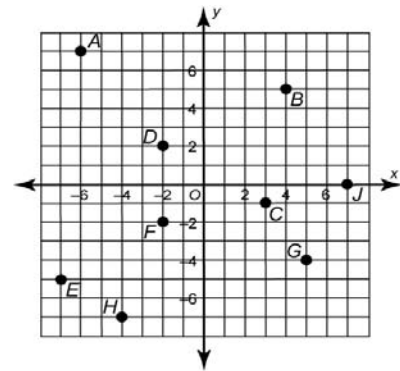
1. A ladder is placed 4 feet from the base of a building. The ladder reaches a height of 12 feet. What is the length of the ladder? Round your answer to the nearest tenth.

2. Maria left her house and walked 2 miles north. Then she turned and walked 3 miles west. How far is Maria from her house? Round your answer to the nearest tenth.

3. A rectangular patio has a diagonal walkway. The length of one side of the patio is 9 meters long. The length of the other side of the patio is 12 meters long? How long is the walkway? Round your answer to the nearest tenth.

Find the distance between the points to the nearest tenth.

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|--------------------------|--------------------------|
| 4. <i>A</i> and <i>B</i> | 5. <i>C</i> and <i>D</i> |
| 6. <i>E</i> and <i>F</i> | 7. <i>F</i> and <i>G</i> |
| 8. <i>G</i> and <i>H</i> | 9. <i>H</i> and <i>J</i> |



Tell whether the given side lengths form a right triangle.

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|----------------|----------------|
| 10. 8, 9, 10 | 11. 12, 14, 15 |
| 12. 5, 12, 13 | 13. 14, 15, 21 |
| 14. 17, 19, 25 | 15. 7, 24, 25 |

