Solve the equation for the missing variable. Assume all variables are positive. Express the answer in simplified radical form.

1. $c^{2}=6^{2}+6^{2}$
2. $c^{2}-4^{2}=4^{2}$
3. $c^{2}-100=(10 \sqrt{3})^{2}$
4. $a^{2}+8^{2}=256$
5. $(18 \sqrt{3})^{2}+b^{2}=1296$

## Daily Homework Quiz

For use after Lesson 9.3, pages 542-549
Decide whether the numbers can represent the side lengths of a triangle. If they can, classify the triangle as right, acute, or obtuse.

1. $12,35,37$
2. $22,25,40$
3. $15,17,34$

Graph points $P, Q$, and $R$. Connect the points to form $\triangle P Q R$. Decide whether $\triangle P Q R$ is right, acute, or obtuse.
4. $P(-3,2), Q(-2,-2), R(1,1)$
5. $P(1,2), Q(5,-2), R(3,-4)$

