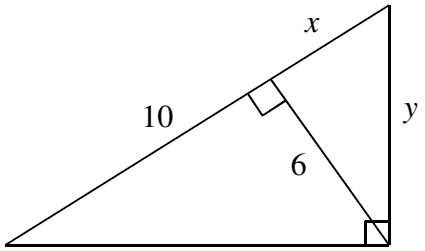
Name_____Per_____Date_____
Geometry Ch. 8 Practice Test

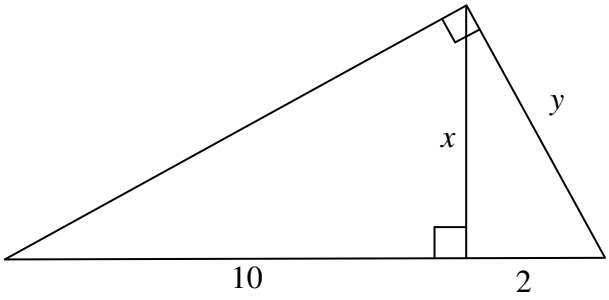
1. Find the geometric mean between 8 and 12. **Leave your answer in simplified square root form.**

2. Find the geometric mean between 3 and 10. **Leave your answer in simplified square root form.**

3. Solve for *x* and *y*. **Leave your answers in simplified square root form.**

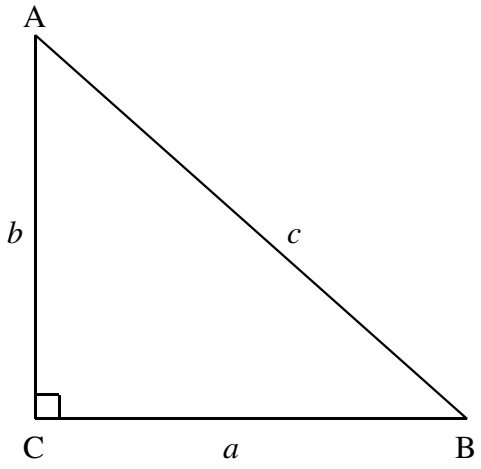


4. Solve for x and y. **Leave your answers in simplified square root form.**



Use ΔABC for problems 5-6. Leave your answers in simplified square root form.

5. $a = 12$, $b = 8$. Find c.



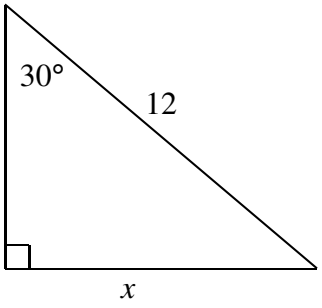
6. $b = 7$, $c = 24$. Find a.

7. Determine if ΔXYZ is a right triangle if $x = 41$, $y = 40$, $z = 9$.

8. Determine if ΔXYZ is a right triangle if $x = \sqrt{40}$, $y = 20$, $z = 21$.

For problems 9-12 find the EXACT value of *x* using 45-45-90 rules or 30-60-90 rules .

9.



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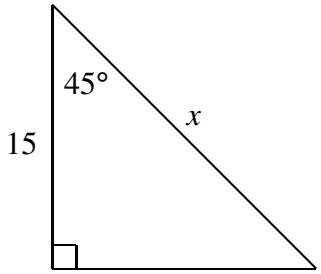

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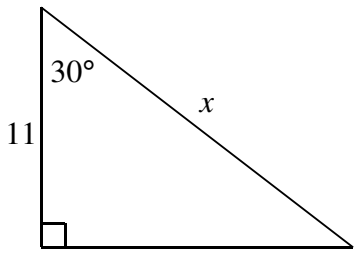

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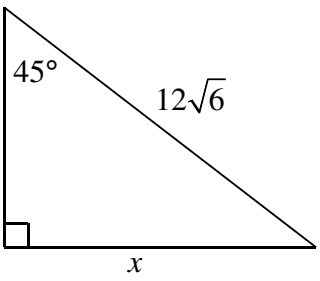


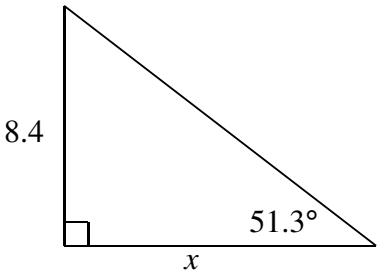
Make a sketch for problems 13-14. Leave your answers in simplified square root form.

13. The perimeter of an equilateral triangle 39 cm. Find the length of the altitude.

14. The length of a diagonal of a square is $17\sqrt{2}$ in. Find the perimeter of the square.

For problems 15-18, Find *x*. Round angle measures and side lengths to the nearest tenth.

15.



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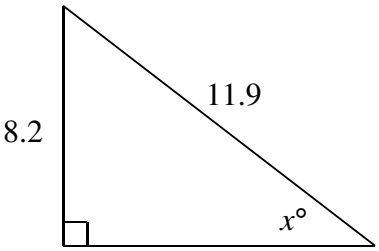

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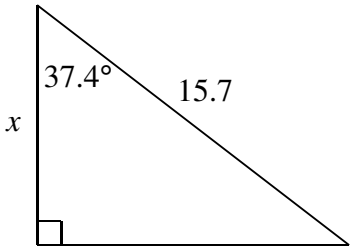

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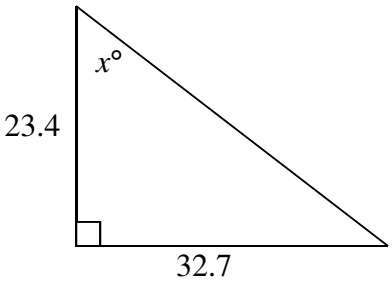

19. Sarah is flying a kite. She has let out 74 feet of string and ties the string to the ground. If the kite is 60 feet in the air find the angle of elevation from the ground to the string. Round your answer to the nearest tenth.

20. An airplane is 2560 feet in the air. The angle of depression from the plane to the airport is 22.4°. How far is the ground distance from the airplane from the airport? Round your answer to the nearest tenth.