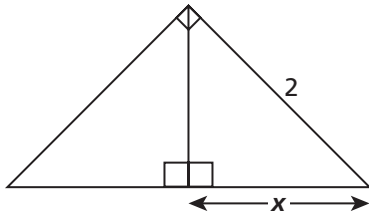


GRADE 10 Focus on Sunshine State Standards: Benchmark Tests
10 MA.912.G.5.3 Benchmark Pre-Test (Multiple Choice)

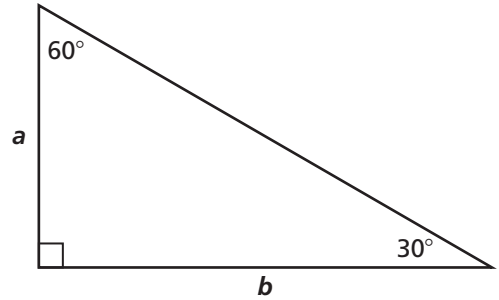
- Which set of three integers could be a Pythagorean Triple?
 - $a = 3; b = 5; c = 8$
 - $a = 4; b = 5; c = 8.6$
 - $a = 8; b = 15; c = 22$
 - $a = 20; b = 48; c = 52$

- In the diagram below, the large triangle is a $45^\circ-45^\circ-90^\circ$ triangle. What is the value of x ?



- 1
 - $\sqrt{2}$
 - 2
 - $2\sqrt{2}$
- Two $30^\circ-60^\circ-90^\circ$ triangles can be formed by cutting which type of triangle along an axis of symmetry?
 - $45^\circ-45^\circ-90^\circ$
 - $30^\circ-60^\circ-90^\circ$
 - equilateral
 - isosceles

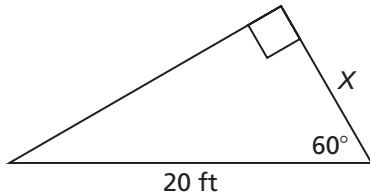
Use the triangle for problems 4–6.



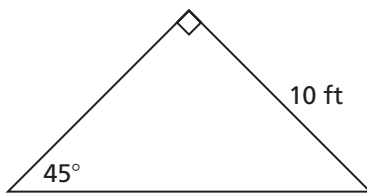
- If the length of the hypotenuse is 4, what is the length of side a ?
 - $\frac{\sqrt{2}}{2}$
 - 1
 - $\sqrt{3}$
 - 2
- If the length of side b is $2\sqrt{3}$, what is the length of side a ?
 - $\frac{1}{2}$
 - 1
 - $\sqrt{3}$
 - 2
- Which pair of measurements could be the lengths of sides a and b ?
 - $a = 1; b = 2$
 - $a = 1; b = \sqrt{3}$
 - $a = 2; b = \sqrt{3}$
 - $a = 2; b = \sqrt{5}$

GRADE 10 **Focus on Sunshine State Standards: Benchmark Tests**
MA.912.G.5.3 Benchmark Pre-Test (Gridded Response)

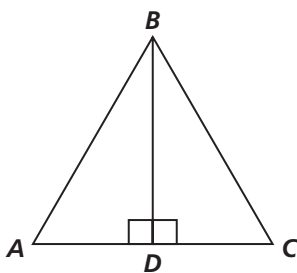
7. On the triangle below, what is the length of side X ? (Round your answer to the nearest tenth of a foot.)



8. What is the perimeter of the triangle below? (Round your answer to the nearest tenth of a foot.)



9. If $\triangle ABC$ is an equilateral triangle and the length of $\overline{BC} = 6$, what is the length of \overline{BD} ? (Round your answer to the nearest tenth.)



10. Tarin measured the hypotenuse of a $45^\circ-45^\circ-90^\circ$ triangle to be $\sqrt{200}$. What is the length of one of the sides?

11. If the short side of a $30^\circ-60^\circ-90^\circ$ triangle is 0.5 feet, how long is the longest side?

12. A side view of a roof is shown below. The peak of the roof is 16 feet above the floor of the attic. Julio is replacing the wooden trim that forms a triangular shape on each end of the house. How many feet of wood does he need to replace this trim on BOTH ends of the house? Round your answer to the nearest tenth of a foot.

