

NAME: _____

1. Which of the following *cannot* be the lengths of a 30° - 60° - 90° triangle?

[A] 5, 10, $5\sqrt{3}$ [B] 8, 4, $8\sqrt{3}$

[C] $\frac{7}{3}$, $\frac{14}{3}$, $\frac{7}{3}\sqrt{3}$ [D] 4, 8, $4\sqrt{3}$

2. Which of the following *cannot* be the lengths of a 30° - 60° - 90° triangle?

[A] 4, 8, $4\sqrt{3}$ [B] 11, 22, $11\sqrt{3}$

[C] 10, 5, $10\sqrt{3}$ [D] $\frac{7}{3}$, $\frac{14}{3}$, $\frac{7}{3}\sqrt{3}$

3. The shorter leg of a 30° - 60° - 90° triangle is 8.4 inches long. Find the perimeter.

[A] 37.08 in. [B] 39.75 in.

[C] 47.52 in. [D] 58.2 in.

4. The shorter leg of a 30° - 60° - 90° triangle is 3.4 inches long. Find the perimeter.

[A] 23.56 in. [B] 15.01 in.

[C] 16.09 in. [D] 19.23 in.

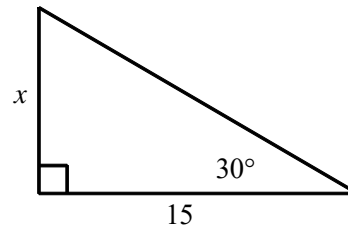
5. In a 30° - 60° - 90° triangle, the length of the side opposite the 30° angle is 4 ft. Find the length of the side opposite the 60° angle, and the length of the hypotenuse.

6. In a 30° - 60° - 90° triangle, the length of the side opposite the 30° angle is 7 mm. Find the length of the side opposite the 60° angle, and the length of the hypotenuse.

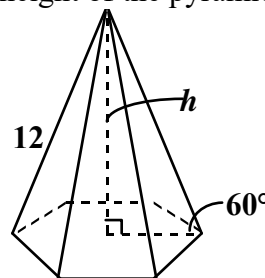
7. The length of the hypotenuse of a 30° - 60° - 90° triangle is 20 m. Find the length of the side opposite the 30° angle.

8. The length of the hypotenuse of a 30° - 60° - 90° triangle is 21 m. Find the length of the side opposite the 30° angle.

9. Solve for x .



10. A hexagonal pyramid has lateral edges of 12 cm and faces inclined at 60° . What is the height of the pyramid?



[1] B

[2] C

[3] B

[4] C

[5] $4\sqrt{3}$ ft, 8 ft

[6] $7\sqrt{3}$ mm, 14 mm

[7] 10 m

[8] 10.5 m

[9] $5\sqrt{3}$

[10] 10.4 cm tall