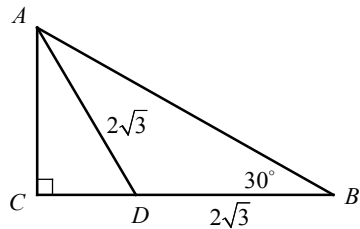


## Exercises - Pythagorean Theorem and Special Right Triangles

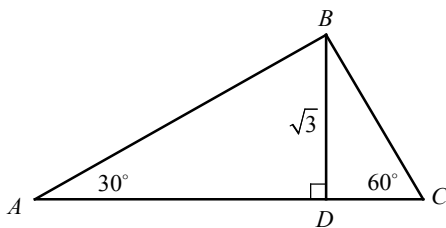
1



In the figure above, if  $AD = BD = 2\sqrt{3}$ , what is the length of  $AB$ ?

- A)  $4\sqrt{3}$
- B)  $3\sqrt{6}$
- C) 6
- D)  $6\sqrt{2}$

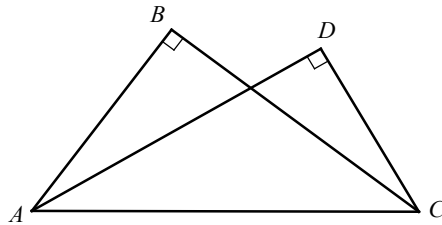
2



In  $\triangle ABC$  above,  $BD = \sqrt{3}$ . What is the perimeter of  $\triangle ABC$ ?

- A)  $2\sqrt{2} + 6$
- B)  $2\sqrt{3} + 6$
- C)  $2\sqrt{6} + 6$
- D)  $3\sqrt{2} + 6$

3

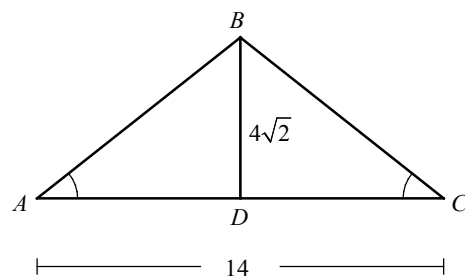


Note: Figure not drawn to scale.

In the figure above,  $AB = 6$ ,  $BC = 8$ , and  $CD = 5$ . What is the length of  $AD$ ?

- A)  $4\sqrt{3}$
- B)  $5\sqrt{2}$
- C)  $5\sqrt{3}$
- D)  $6\sqrt{2}$

4



Note: Figure not drawn to scale.

In the figure above,  $\angle A \cong \angle C$  and  $\overline{BD}$  bisects  $\overline{AC}$ . What is the perimeter of  $\triangle ABC$ ?

- A) 32
- B) 36
- C)  $14 + 10\sqrt{2}$
- D)  $14 + 12\sqrt{2}$