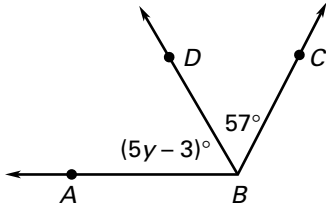


GEOMETRY: CONCEPTS AND SKILLS
CHAPTER 2, LESSON 2, EXTRA EXAMPLE

Extra Example 4 Use Algebra with Angle Measures

\vec{AD} bisects $\angle ABC$. Find the value of y .



SOLUTION

$$m\angle ABC = \angle ABC$$

$$(5y - 3)^\circ = 57^\circ$$

$$5y - 3 + 3 = 57 + 3$$

$$5y = 60$$

$$\frac{5y}{5} = \frac{60}{5}$$

$$y = 12$$

\vec{AD} bisects $\angle ABC$.

Substitute given measures.

Add 3 to each side.

Simplify.

Divide each side by 5.

Simplify.

ANSWER ♦ The value of y is 12.