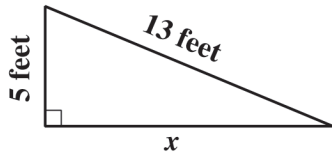


Know and understand the Pythagorean theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean theorem by direct measurement.
7MG3.3

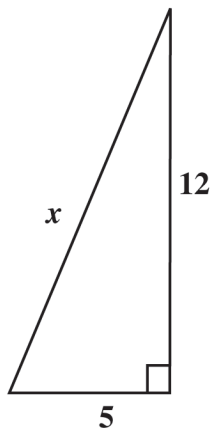
126. What is the value of x in the right triangle shown below?



- A 8 feet
- B 12 feet
- C 18 feet
- D 23 feet

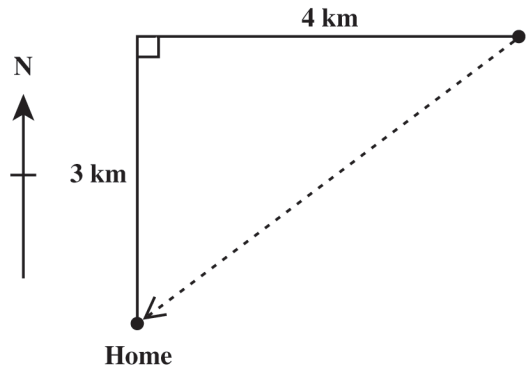
128. What is the value of x in the triangle shown above?

- A 11
- B 13
- C 17
- D 169



Which equation is true for all values of x , y , and z ?

- A $x + y = z$
- B $x^2 + y^2 = z^2$
- C $x^2 \cdot y^2 = z^2$
- D $\frac{1}{2}xy = z$



127. The club members hiked 3 kilometers north and 4 kilometers east, but then went directly home as shown by the dotted line. How far did they travel to get home?

- A 4 km
- B 5 km
- C 6 km
- D 7 km

129. In the drawing below, the figure formed by the squares with sides that are labeled x , y , and z is a right triangle.

