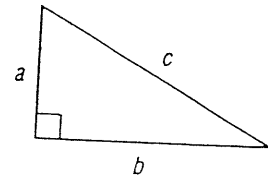


7.1 The Pythagorean Theorem

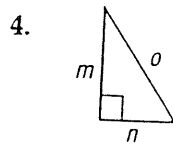
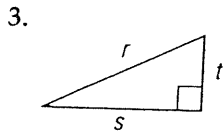
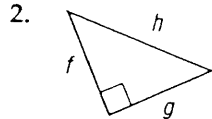
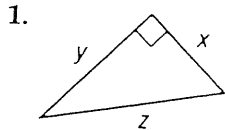
MATHPOWER™ Eight, pp. 206-207

The Pythagorean Theorem states that in any right triangle, if c is the length of the hypotenuse, and a and b are the lengths of the legs, then

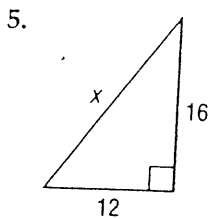
$$a^2 + b^2 = c^2$$



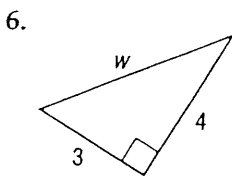
State the relationship in the form $a^2 + b^2 = c^2$ for the sides in each triangle.



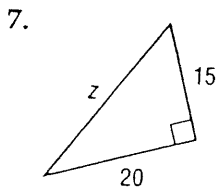
Find the length of the unknown side in each right triangle.



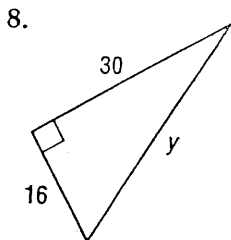
$x =$ _____



$w =$ _____

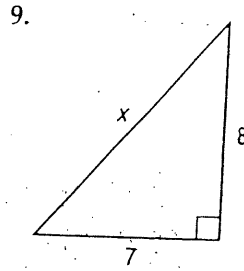


$z =$ _____

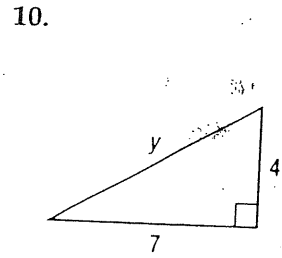


$y =$ _____

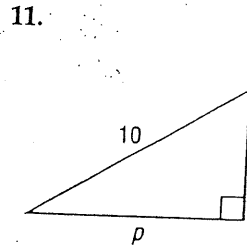
Calculate the length of the unknown side, to the nearest tenth.



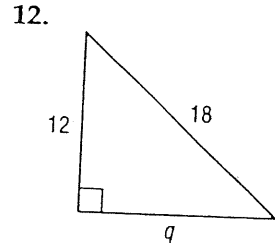
$x =$ _____



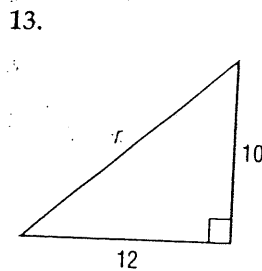
$y =$ _____



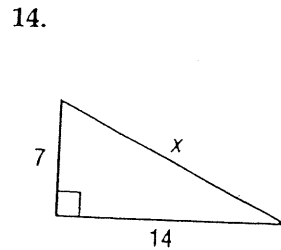
$p =$ _____



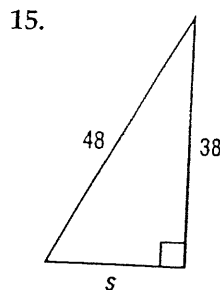
$q =$ _____



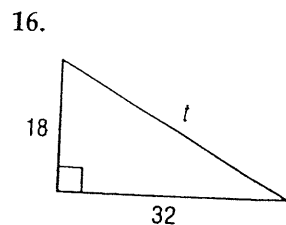
$r =$ _____



$x =$ _____



$s =$ _____



$t =$ _____