1. Find the missing side lengths in the right triangles below using pythagorean theorem

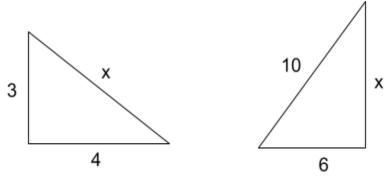


Image of two triangles; first labeled sides 3 and 4, second labeled leg 6 and hypotenuse 10

2. Find the area of each square below. Be prepared to explain your thinking

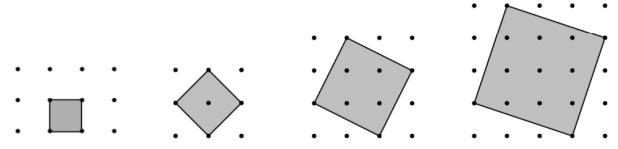


Image obtained from Mathematics Assessment Project

## **ANSWER KEY**

- 1. A.  $3^2 + 4^2 = x^2$ , x=5 B.  $6^2 + x^2 = 10^2$ , x=8
- 2. A. 1 square unit, for B-D, you can either use the Pythagorean theorem to find the length of each side of the square and then multiply it by itself, or you can find the area of the overall rectangle and then subtract the area of the triangles outside the square: B. 2 square units, C. 5 square units, D. 10 square units