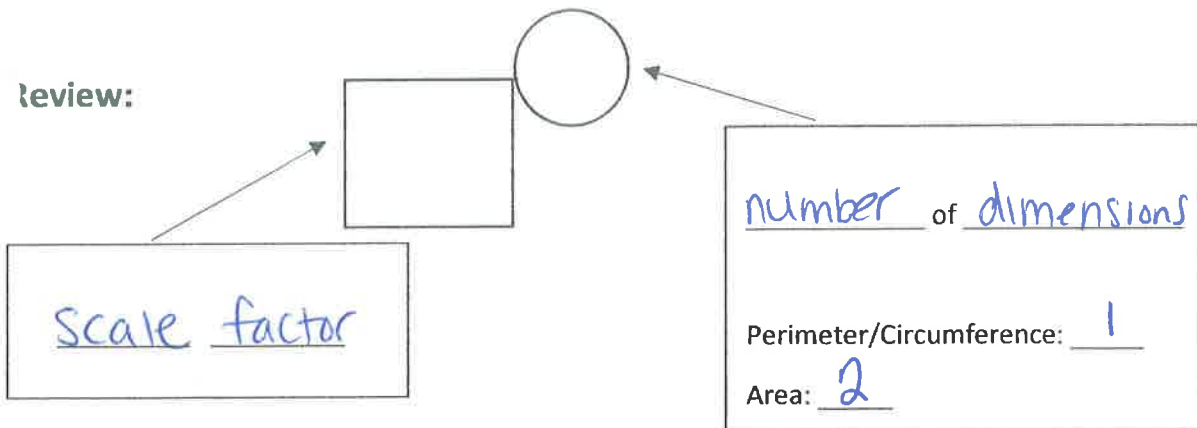


Changing Dimensions

KEY

review:



The answer gives us how much the perimeter or area has changed by, NOT the new perimeter or area!



1. A preschool has a rectangular field and a rectangular playground that are similar in shape. Each dimension of the field is 3.2 times the corresponding dimension of the playground.

Part A: The perimeter of the field is 3.2 times the perimeter of the playground.

$$\boxed{3.2}^{\textcircled{1}} = 3.2$$

Part B: The area of the field is 10.24 times the area of the playground.

$$\boxed{3.2}^{\textcircled{2}} = 10.24$$

2. The side length of a smaller square is one-third the side length of a larger square. How does the area of the smaller square compare to the area of the larger square?

$$\boxed{\frac{1}{3}}^{\textcircled{2}} = \frac{1}{9}$$

The smaller square is $\frac{1}{9}$ the size of the larger square

3. A triangle is enlarged by multiplying each of its dimensions by 4.

Part A: The perimeter of the new triangle is 4 times the perimeter of the original triangle.

$$\boxed{4}^{\textcircled{1}} = 4$$

Part B: The area of the new triangle is 16 times the area of the original triangle.

$$\boxed{4}^{\textcircled{2}} = 16$$