

13.3 Area and Perimeter

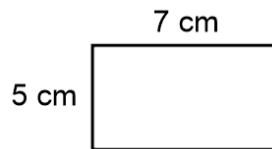
MATH 7

Write your questions here!



Original Rectangle

Scale Factor = 2



Original Perimeter =

New Perimeter =

Original Area =

New Area =

The ratio of original perimeter to similar perimeter is _____

The ratio of original area to similar area is _____

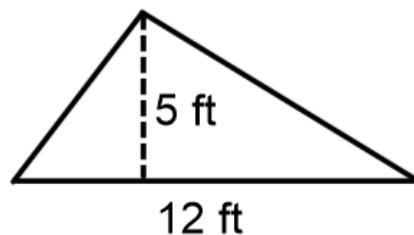
A rectangle with perimeter of 30 cm is scaled up by a factor of 3. What is the new rectangle's perimeter?

A rectangle with area of 20 cm^2 is scaled up by a factor of 3. What is the new rectangle's area?

Find the perimeter and area.

Original Triangle

Scale Factor = $\frac{1}{4}$



Original Area =

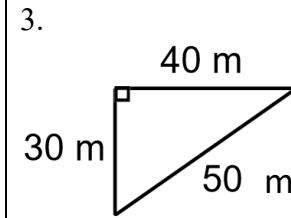
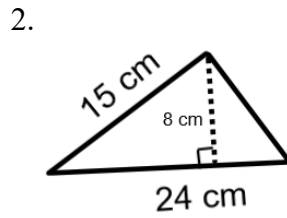
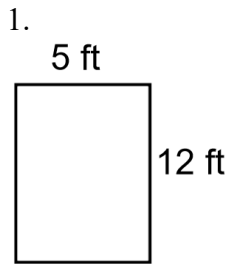
New Area =

SUMMARY:

Now, summarize your notes here!



Find the area of the following. Label you answer!

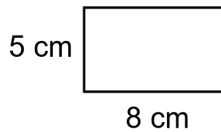


Draw and label the sides of the similar figures with the given scale factor. Find the perimeter and area.

4.

Original Figure

Scale Factor = 3



Original Perimeter =

Original Area =

New Perimeter =

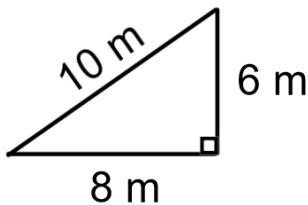
New Area =

How many times bigger is the new area to the original area?

5.

Original Figure

Scale Factor = 2



Original Perimeter =

Original Area =

New Perimeter =

New Area =

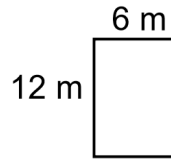
How many times bigger is the new perimeter to the original perimeter?

Label the sides of the similar figures with the given scale factor. Find the perimeter and area.

6.

Original Figure

Scale Factor = $\frac{1}{2}$



Original Perimeter =

New Perimeter =

Original Area =

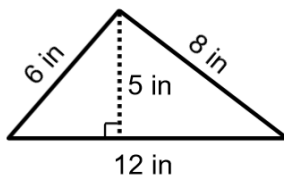
New Area =

How many times bigger is the new perimeter to the original perimeter?

7.

Original Figure

Scale Factor = 4



Original Perimeter =

New Perimeter =

Original Area =

New Area =

How many times bigger is the new area to the original area?

Answer the following.

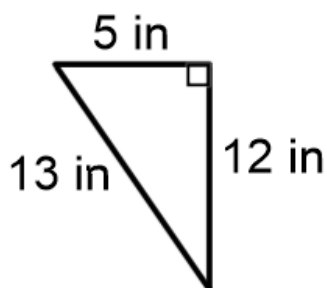
8. A rectangle with perimeter of 120 cm is scaled up by a factor of 5. What is the new rectangle's perimeter?

9. A rectangle with area of 40 cm^2 is scaled up by a factor of 5. What is the new rectangle's area?

10. A triangle with perimeter of 28 ft is scaled down by a factor of $\frac{3}{4}$. What is the new rectangle's perimeter?

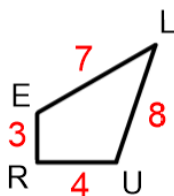
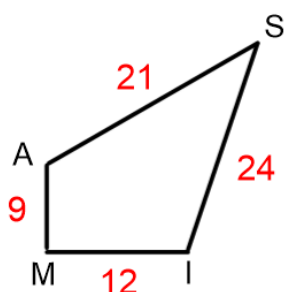
11. A triangle with area of 54 cm^2 is scaled down by a factor of $\frac{1}{3}$. What is the new rectangle's area?

1. Find the area.



2. A rectangle with area of 24 cm^2 is scaled up by a factor of 4. What is the new rectangle's area?

3. Given $SIMA \sim LURE$ and the area of figure $SIMA = 36 \text{ m}^2$, find the area of figure $LURE$.



EXIT TICKET –

Sully is tiling his kitchen below. Tile cost \$3.50 per square foot. Mr. Kelly is tiling his kitchen with the same tiles. The dimensions of Kelly's kitchen are twice as big as Sully's kitchen. Mr. Kelly thinks that he will spend twice as much as Sully. Is correct? Justify your solution.

