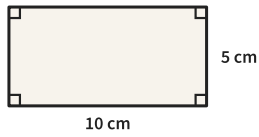


Percentages and area



1

The length and width of this rectangle are both increased by 20%. Find the percentage increase in its area.



New lengths **12** and **6** cm

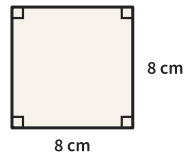
New area **72** cm²

Change ÷ 50 =

Answer

2

Each side of this square is increased by 10%. Find the percentage increase in its area.



New lengths **8.8** and **8.8** cm

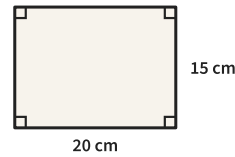
New area cm²

Change ÷ 64 =

Answer

3

The length and width of this rectangle are both decreased by 10%. Find the percentage decrease in its area.



New lengths and cm

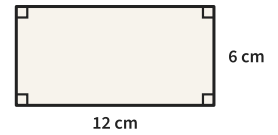
New area cm²

Change ÷ 300 =

Answer

4

The length of this rectangle is increased by 25% and its width is decreased by 20%. Find the percentage change in its area.

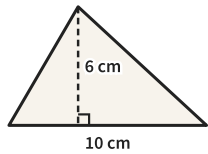


Change ÷ 72 =

Answer

5

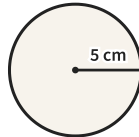
The base and height of this triangle are both increased by 50%. Find the percentage increase in its area.



Answer

6

The radius of this circle is increased by 20%. Find the percentage increase in its area.



Answer

7

Each side of a square is increased by 30%. Its area is now 169 cm². Find the length of a side of the original square.

Answer

8

A photo 15 cm by 10 cm is enlarged. Its area goes up by 69%. By what percentage does each side go up?

Answer

Percentages and area *further practice*



9

A rectangle is 25 cm long and 8 cm wide. Its length is increased by 12%. Find its new area.

Answer

10

Each side of a square of side 6 cm is decreased by 25%. Find the percentage decrease in its area.

Answer

11

A field is 120 m long and 80 m wide. Its length is decreased by 15% and its width is increased by 15%. Find the percentage change in its area.

Answer

12

Carpet costs £18 per m². A rug 2 m by 3 m is made 10% longer and 10% wider. How much more does the bigger rug cost?

Answer

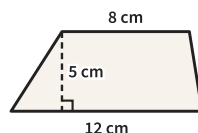
13

The length and width of a rectangle are both increased by $x\%$. Its area goes up by 21%. Find x .

Answer

14

Every length of this trapezium is decreased by 20%. Find its new area and the percentage decrease.



Answer

15

The length of a rectangle is increased by 20%. By what percentage must its width decrease so that its area stays the same? Give your answer to 1 decimal place.

Answer

16

Kim says that increasing each side of a square by 10% increases its area by 20%. Explain why she is wrong and find the right increase.

Answer