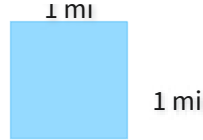


#1

Look at this square: if the side lengths are reduced fourfold, then which of the following statements about its area will be true?



- ☐ The new area will be  $\frac{1}{16}$  of the old area.
- ☐ The new area will be 11 times of the old area.
- ☐ The new area will be  $\frac{81}{1250}$  of the old area.
- ☐ The new area will be 7 times of the old area.

Show your work

#2

Look at this rectangle: if the both dimensions are quadrupled, then which of the following statements about its perimeter will be true?

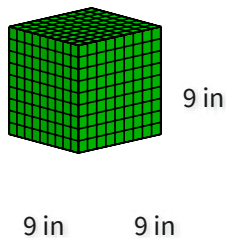


- ☐ The new perimeter will be 10 times of the old perimeter.
- ☐ The new perimeter will be 4 times of the old perimeter.
- ☐ The new perimeter will be  $\frac{2}{3}$  of the old perimeter.
- ☐ The new perimeter will be 7 times of the old perimeter.

Show your work

#3

Look at this cube: if the side lengths are quadrupled, then which of the following statements about its surface area will be true?



- ☐ The new surface area will be  $\frac{7}{16}$  of the old surface area.
- ☐ The new surface area will be 16 times of the old surface area.
- ☐ The new surface area will be 7 times of the old surface area.
- ☐ The new surface area will be 3 times of the old surface area.

Show your work

#4

Look at this rectangle: if the base is reduced fourfold, then which of the following statements about its area will be true?



- ☐ The new area will be 6 times of the old area.
- ☐ The new area will be 5 times of the old area.
- ☐ The new area will be  $\frac{1}{4}$  of the old area.
- ☐ The new area will be  $\frac{21}{100}$  of the old area.

Show your work

#5

Look at this rectangle: if the side lengths are halved, then which of the following statements about its area will be true?



- ☐ The new area will be 11 times of the old area.
- ☐ The new area will be  $\frac{1}{5}$  of the old area.
- ☐ The new area will be  $\frac{1}{4}$  of the old area.
- ☐ The new area will be 9 times of the old area.

Show your work

#6

Look at this rectangle: if the base is tripled, then which of the following statements about its area will be true?

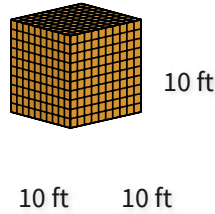


- ☐ The new area will be 3 times of the old area.
- ☐ The new area will be  $\frac{1}{2}$  of the old area.
- ☐ The new area will be 4 times of the old area.
- ☐ The new area will be 5 times of the old area.

Show your work

#7

Look at this cube: if the side lengths are reduced fourfold, then which of the following statements about its surface area will be true?



- ☐ The new surface area will be  $\frac{811}{10000}$  of the old surface area.
- ☐ The new surface area will be 7 times of the old surface area.
- ☐ The new surface area will be  $\frac{1}{16}$  of the old surface area.
- ☐ The new surface area will be 9 times of the old surface area.

Show your work

#8

Look at this rectangle: if the base is tripled, then which of the following statements about its area will be true?

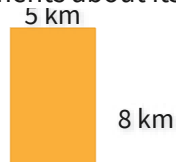


- ☐ The new area will be 3 times of the old area.
- ☐ The new area will be  $\frac{1}{2}$  of the old area.
- ☐ The new area will be 7 times of the old area.
- ☐ The new area will be 8 times of the old area.

Show your work

#9

Look at this rectangle: if the side lengths are halved, then which of the following statements about its area will be true?



- ☐ The new area will be  $\frac{21}{100}$  of the old area.
- ☐ The new area will be  $\frac{1}{4}$  of the old area.
- ☐ The new area will be 6 times of the old area.
- ☐ The new area will be 8 times of the old area.

Show your work

#10

Look at this rectangle: if the side lengths are halved, then which of the following statements about its area will be true?

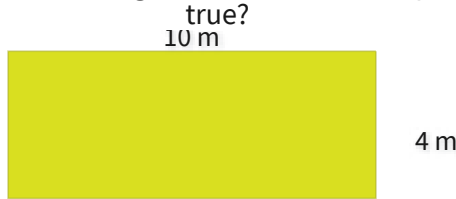


- ☐ The new area will be 12 times of the old area.
- ☐ The new area will be 14 times of the old area.
- ☐ The new area will be  $\frac{9}{50}$  of the old area.
- ☐ The new area will be  $\frac{1}{4}$  of the old area.

Show your work

#11

Look at this rectangle: if the both dimensions are reduced fourfold, then which of the following statements about its perimeter will be true?

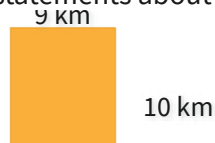


- ☐ The new perimeter will be  $\frac{1}{4}$  of the old perimeter.
- ☐ The new perimeter will be  $\frac{1}{5}$  of the old perimeter.
- ☐ The new perimeter will be 3 times of the old perimeter.
- ☐ The new perimeter will be 9 times of the old perimeter.

Show your work

#12

Look at this rectangle: if the side lengths are reduced fourfold, then which of the following statements about its area will be true?



- ☐ The new area will be  $\frac{1}{16}$  of the old area.
- ☐ The new area will be 9 times of the old area.
- ☐ The new area will be  $\frac{13}{200}$  of the old area.
- ☐ The new area will be 12 times of the old area.

Show your work

Question	Answer
#1	choice 1
#2	choice 2
#3	choice 2
#4	choice 3
#5	choice 3
#6	choice 1
#7	choice 3
#8	choice 1
#9	choice 2
#10	choice 4
#11	choice 1
#12	choice 1