#1

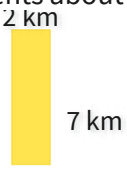
Look at this rectangle: if the base is tripled, then which of the following statements about its area will be true?


- 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

#2

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 3 times of the old area.
- The new area will be 9 times of the old area.
- The new area will be $\frac{13}{50}$ of the old area.
- The new area will be $\frac{1}{4}$ of the old area.

Show your work

#3

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

#4

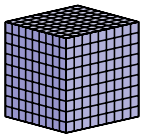
Look at this square: if the side lengths are reduced fourfold, then which of the following statements about its area will be true?


- The new area will be 8 times of the old area.
- The new area will be $\frac{1}{16}$ of the old area.
- The new area will be $\frac{293}{5000}$ of the old area.
- The new area will be 6 times of the old area.

Show your work

#5

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

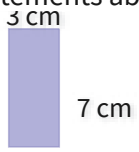



- The new volume will be 55 times of the old volume.
- The new volume will be 17 times of the old volume.
- The new volume will be $\frac{143}{1000}$ of the old volume.
- The new volume will be $\frac{1}{8}$ of the old volume.

Show your work

#6

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

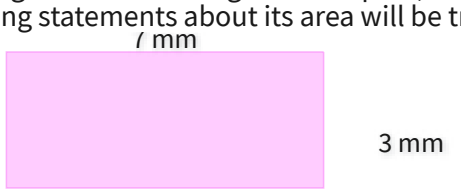



- The new area will be 14 times of the old area.
- The new area will be $\frac{29}{400}$ of the old area.
- The new area will be 4 times of the old area.
- The new area will be $\frac{1}{16}$ of the old area.

Show your work

#7

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




- The new area will be $\frac{2}{3}$ of the old area.
- The new area will be 9 times of the old area.
- The new area will be 16 times of the old area.
- The new area will be 4 times of the old area.

Show your work

#8

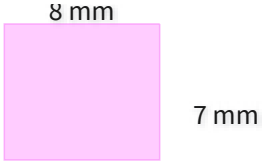
Look at this rectangle: if the base is quadrupled, then which of the following statements about its area will be true?


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

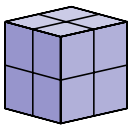



- The new area will be 12 times of the old area.
- The new area will be 14 times of the old area.
- The new area will be $\frac{9}{50}$ of the old area.
- The new area will be $\frac{1}{4}$ of the old area.

Show your work

#10

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



2 in

2 in 2 in

- The new volume will be $\frac{1}{64}$ of the old volume.
- The new volume will be 63 times of the old volume.
- The new volume will be 16 times of the old volume.
- The new volume will be $\frac{2879}{250000}$ of the old volume.

Show your work

#11

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

4 mi

1 mi

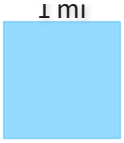
- The new area will be 6 times of the old area.
- The new area will be 5 times of the old area.
- The new area will be $\frac{1}{4}$ of the old area.
- The new area will be $\frac{21}{100}$ of the old area.

Show your work

#12

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

1 mi



1 mi

- 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

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