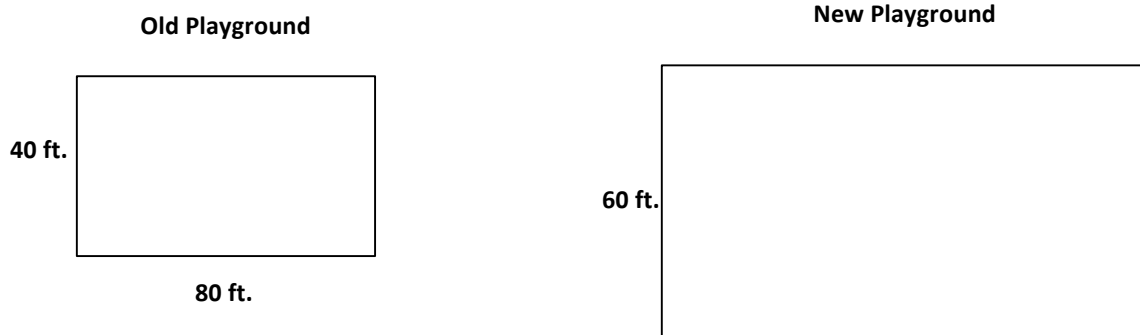


**S1**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



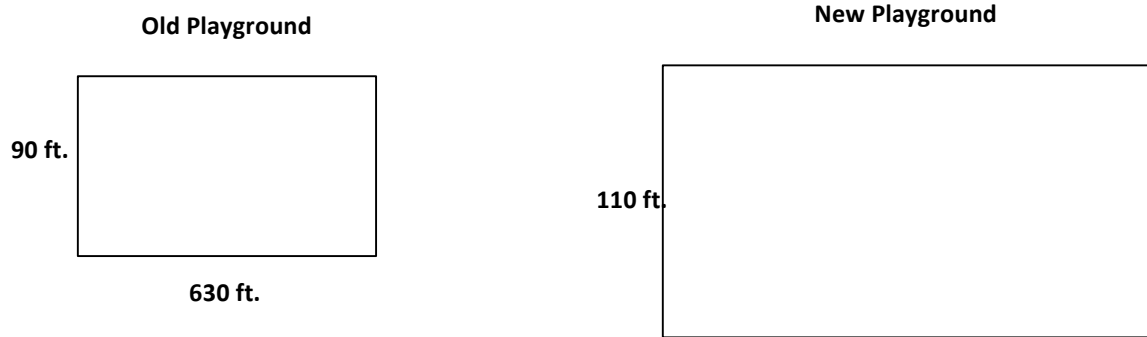
How long is the missing length of the new playground?

Show your work.

**S2**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



How long is the missing length of the new playground?

Show your work.

**S3**

The dimensions of 4 rectangles are given below.

Which two rectangles are similar?

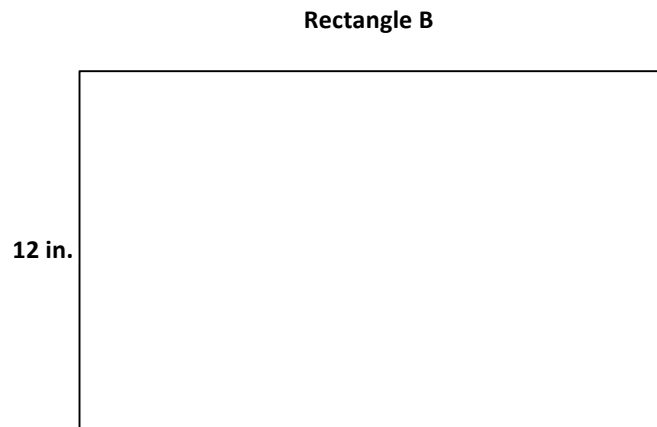
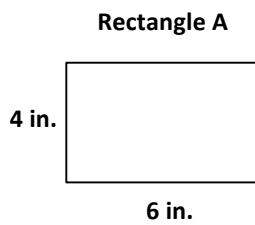
Explain your choice

- A. 2" x 8"
- B. 4" x 10"
- C. 6" x 12"
- D. 6" x 15"

**S4**

These two rectangles are similar. The rectangles are not drawn to scale.

Find the **area** of rectangle B.



Show your work.

**S5**

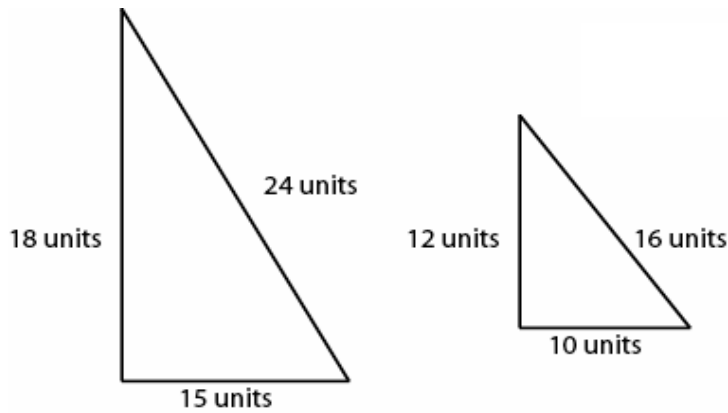
John says the two triangles shown below are similar.

Diane says they are not similar.

Who is correct?

Explain your choice.

*Triangles are not drawn to scale*



**S6**

The town enlarged a rectangular playground.

The dimensions of the new playground are proportional to the dimensions of the old playground.

Use the information below to determine the length of the new playground?

Show your work.

	<b>OLD PLAYGROUND</b>	<b>NEW PLAYGROUND</b>
<b>Width</b>	50 feet	150 feet
<b>Length</b>	80 feet	$x$

**S7**

The dimensions of 4 rectangles are given below.

Which two are similar rectangles?

Explain your choice.

A. 2" x 3"

B. 4" x 5"

C. 6" x 9"

D. 6" x 10"

**S8**

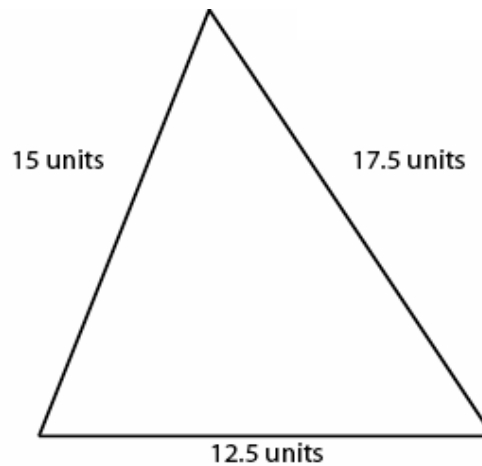
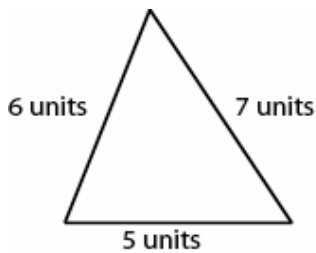
John says the two triangles shown below are similar.

Diane says the two triangles are not similar.

Who is correct?

Explain your choice.

*Triangles are not drawn to scale*

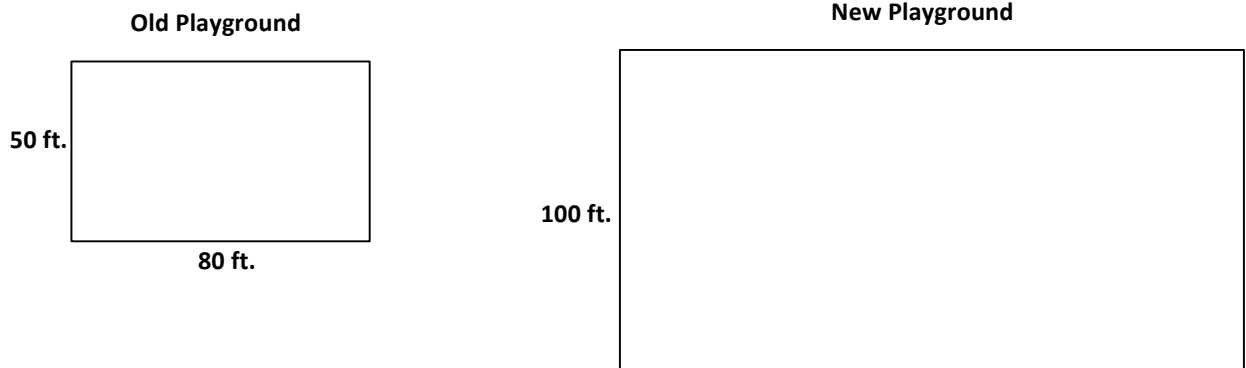




**S9**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



Both playgrounds have fencing around their perimeters.

The amount of fencing around the New Playground is how many times greater than the length of fencing around the Old Playground?

Show your work.

**S10**

The dimensions of 4 rectangles are given below.

- Sam says Rectangles A and C are similar.
- Mark says Rectangles B and D are similar.
- Leslie says there are no similar rectangles in the list below.

Who is right?

Explain your choice.

A. 2" x 6"

B. 2" x 4"

C. 3" x 4"

D. 4" x 6"

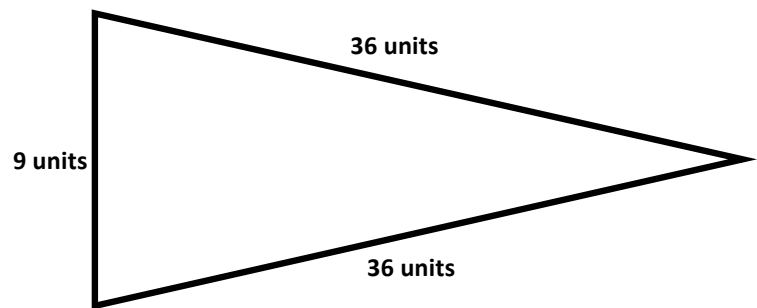
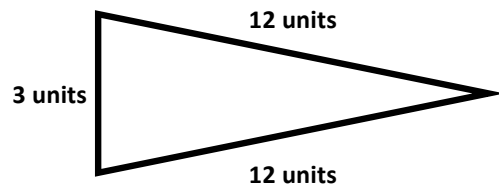
**S11**

John says the two triangles below are similar.

Diane says the two triangles are not similar.

Who is correct?

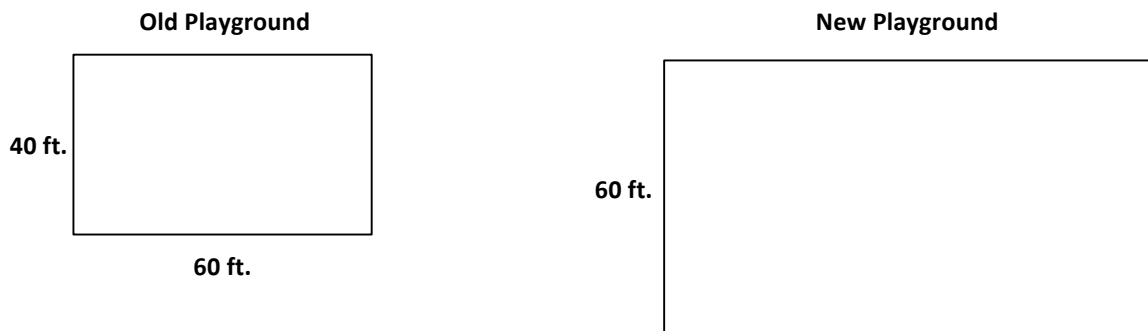
Explain your choice.



**S12**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



The school is building a fence around the new playground.

Fencing comes in 500 foot rolls.

Will one roll of fencing be enough to put fence around the new playground?

Explain your answer.

**S13**

The dimensions of 4 rectangles are given below.

Which two are similar rectangles?

Explain your choice.

A. 2" x 6"

B. 4" x 10"

C. 6" x 12"

D. 6" x 18"

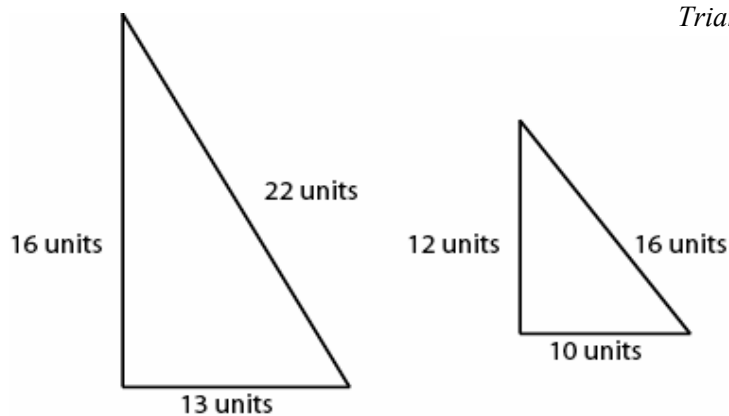
**S14**

John says the two triangles below are similar.

Diane says the two triangles are not similar.

Who is correct?

Explain your choice.

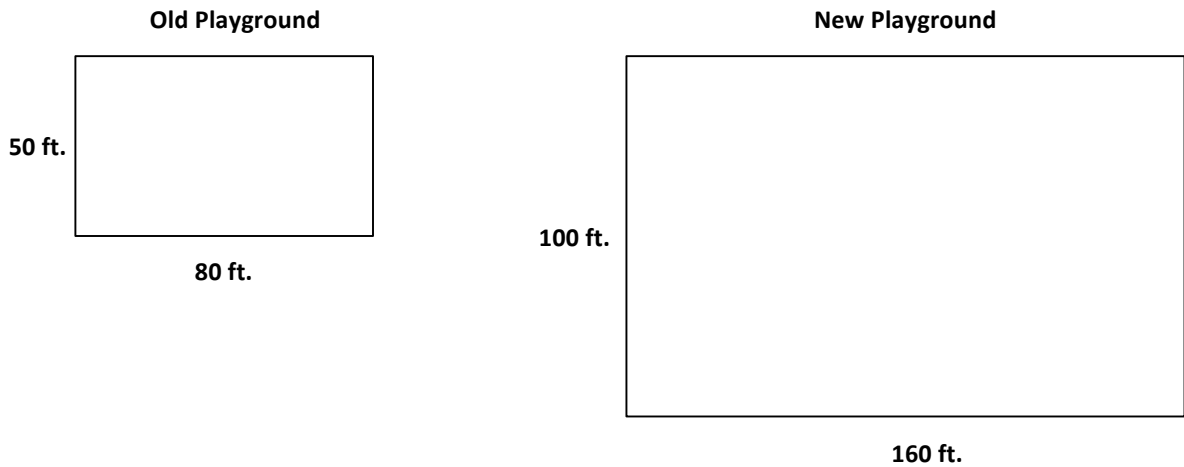


*Triangles are not drawn to scale*

**S15**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



How many times larger is the area of new playground than the area of the old playground?

Show your work.

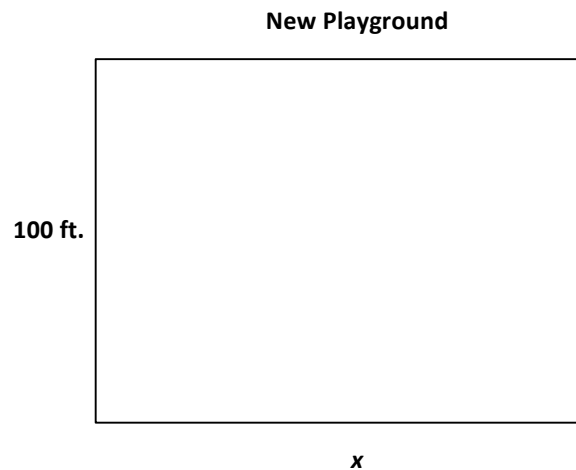
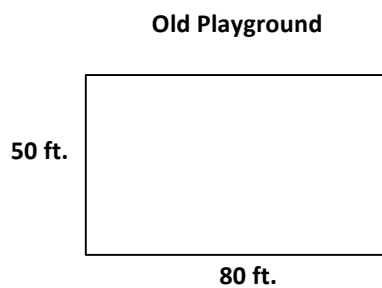
**S16**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.

What is the value of  $x$ ?

Show your work.



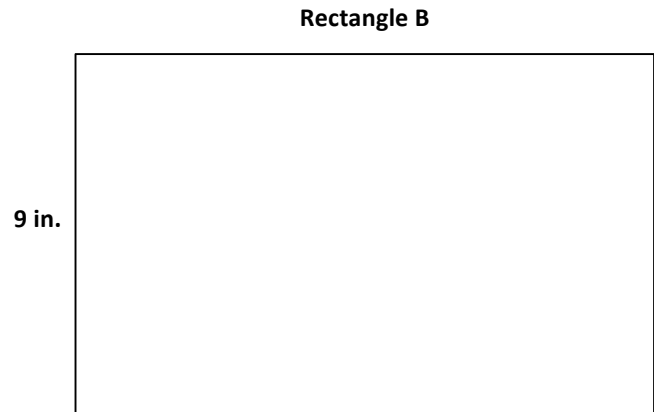
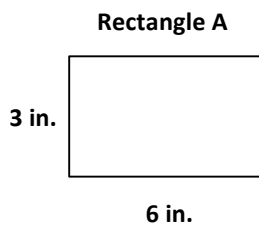


**S17**

The two rectangles below are similar

How many times greater is the area of Rectangle B than the area of Rectangle A?

Show your work.



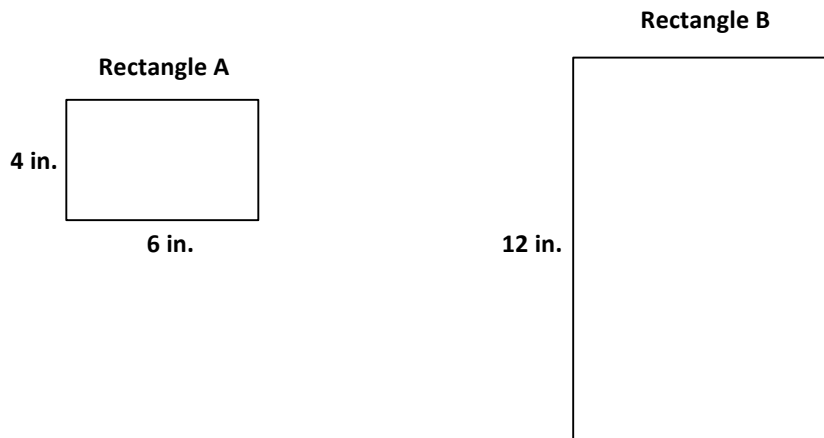
**S18**

The two rectangles are similar.

Find the area of rectangle B.

Show your work.

*Rectangles are not drawn to scale.*



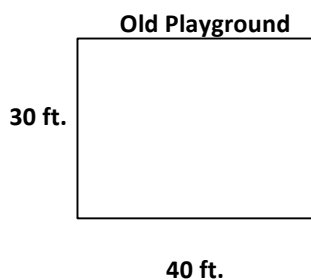
**S19**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.

What is the value of  $x$ ?

Show your work.



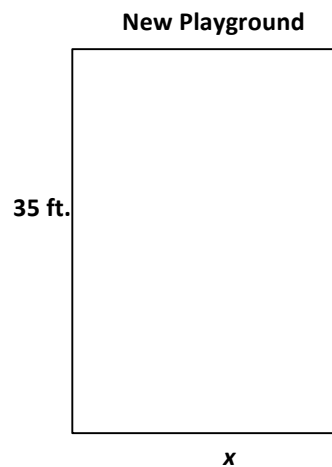
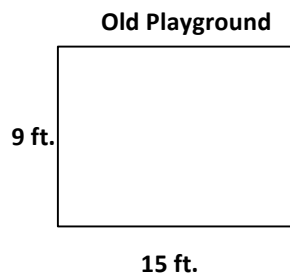
**S20**

A school is enlarging its playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.

What is the value of  $x$ ?

Show your work.



**S21**

A 10 inch by 12 inch cake serves 20 people.

Sally is expecting 40 people to come to a party.

- Sally says that if she doubles the number of people she should double the dimensions of the cake. So she decides to buy a 20 inch by 24 inch cake.
- Laura says there will be too much cake left over and Sally should buy a cake smaller than 20 inches by 24 inches.

Who is correct?

Explain your choice.

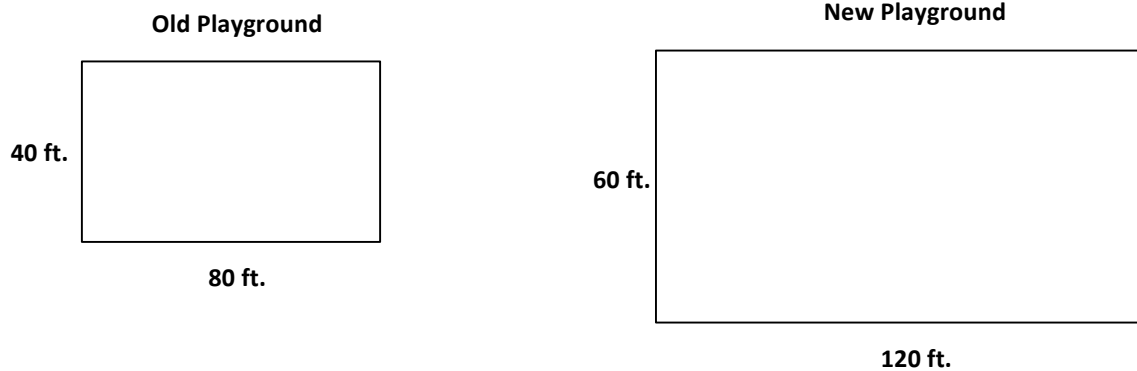
**S22**

A school is making a new playground by enlarging its old playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.

What scale factor did the school use to enlarge the Old Playground?

Show your work.



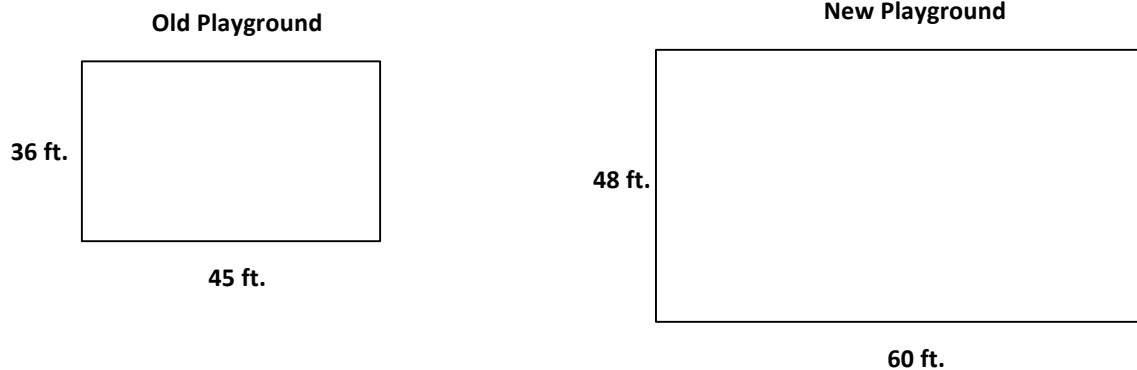
**S23**

A school is making a new playground by enlarging its old playground.

The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.

What scale factor did the school use to enlarge the old playground?

Show your work.

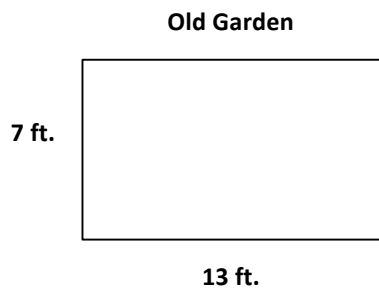


**S24**

Susan is enlarging her old garden. The dimensions of the new garden are proportional to the dimensions of the old garden. The gardens are not drawn to scale.

What is the width of the new garden?

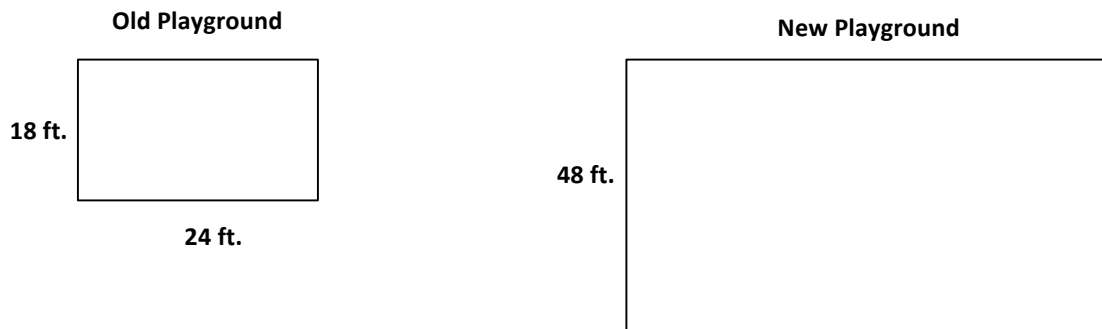
Show your work.





**S25**

A school is enlarging its playground. The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



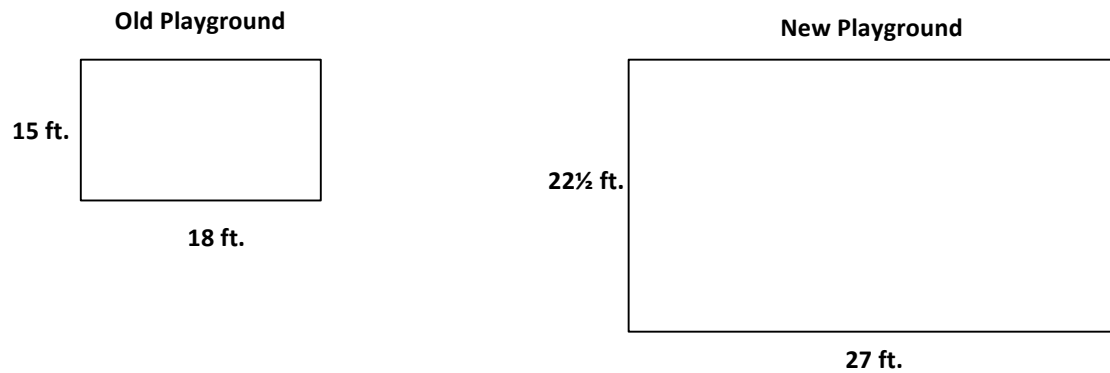
Both playgrounds have fencing around their perimeter.

The amount of fencing around the new playground is how many times greater than the length of fencing around the old playground?

Show your work.

**S26**

A school is enlarging its playground. The dimensions of the new playground are proportional to the dimensions of the old playground. The playgrounds are not drawn to scale.



How many times greater is the area of the new playground than the area of the old playground?

Show your work.

**S27**

Below are scale drawings and dimensions of four rectangles

Circle the two similar rectangles.

Explain your choice.

