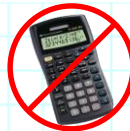


6A.2 Learning Opportunity

Proportional Reasoning



Name: _____

Are the ratios below proportional?

1) $\frac{7}{9} \stackrel{?}{=} \frac{24}{27}$

2) $\frac{10}{4} \stackrel{?}{=} \frac{15}{6}$

3) $\frac{17}{62} \stackrel{?}{=} \frac{3}{11}$

Identify the value of the variable in each proportion below.

4) $\frac{8}{3} = \frac{k}{18}$

5) $\frac{4}{14} = \frac{m}{49}$

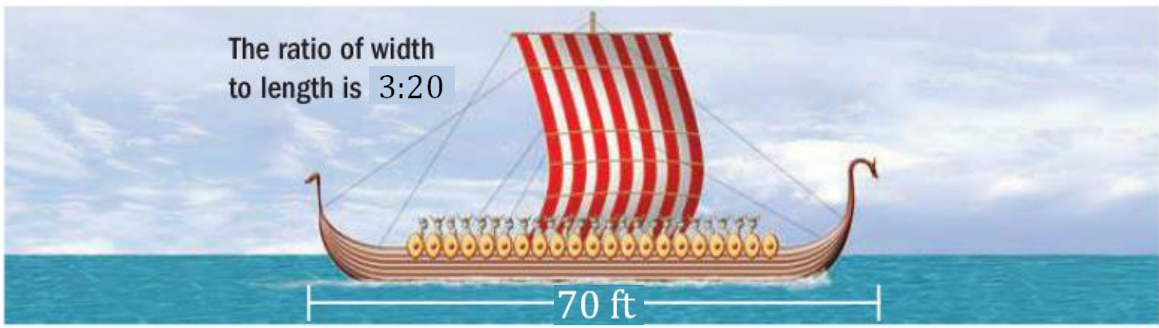
6) $\frac{25}{30} = \frac{x}{12}$

7) $\frac{27}{c} = \frac{9}{12}$

- 8) The elevators in the Empire State Building can pass 80 floors in 45 seconds. Find the number of floors the elevators can pass in 9 seconds.



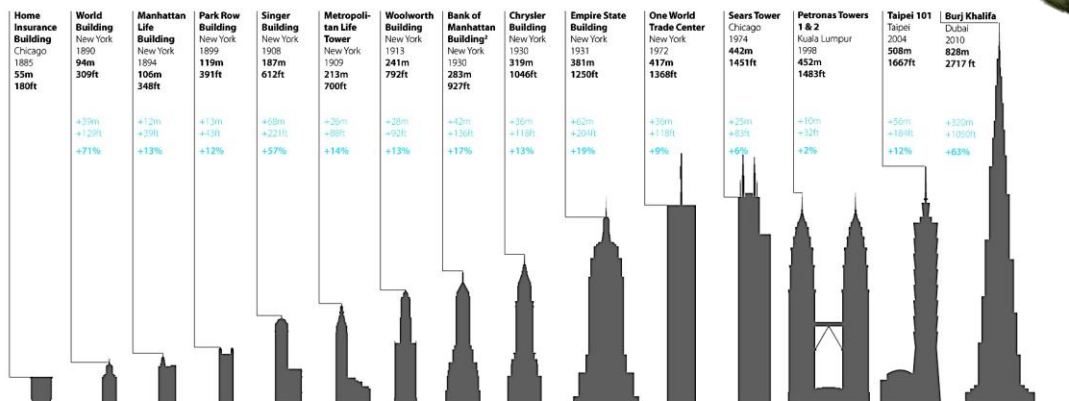
9) The length of a Viking ship is given below. What is its width?



10) If 4 people can paint 2 fences in 5 hours, how many hours in all will it take for 8 people to paint 8 fences?

11) Fleas are the greatest high jumpers in the animal kingdom. A $\frac{1}{8}$ inch flea can jump $27\frac{1}{2}$ inches! The Incredible Hulk is 8 feet 8 inches tall. If the Incredible Hulk jumped like a flea, how high could he jump? Could he jump on any of the buildings shown?

History of the "World's Tallest Building"



*While the Home Insurance Building was never the tallest building in the world, it is considered the first skyscraper constructed (framed/non-loadbearing façade construction) and thus the first "tall building" as defined by the CTBUH.

*Now known as The Trump Building, "Bank of Manhattan Building" was the building's title when it was the "World's Tallest Building"

*Now known as Willis Tower, "Sears Tower" was the building's title when it was the "World's Tallest Building"