

# SOLVE THE PROPORTION!

## LARGE STORY PROBLEM TASK CARDS/STATIONS

Created By: Miss Middle School Teacher

#3



You have a chocolate chip cookie recipe for 60 cookies that calls for 4 cups of chocolate chips! How many cups of chocolate chips are needed for 24 cookies?

#4



You come across a large rectangular door. The ratio of height to length is 2 to 25. If the door is 24 feet high, what is its length?

#7



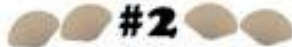
The ratio of the number of movies Greg has to the number of movies Lenny has is 5 to 7. Greg has 75 movies. How many movies do they have all together?



#6



To make the perfect shade of green for one t-shirt, you need 4 parts blue dye to 3 parts yellow dye. ... of the blue dye d for 35 t-shirts? ...



#2

Shelly's Sea Shell Store can sell 13 shells in 3 minutes. At that rate, how many can she sell in 24 minutes?



#1

If there are 1200 calories in 8 oz. of French fries, how many calories are in 3 oz. of French fries?

# TEACHER NOTES:

- 1) Time: 1 class period (55-60 minutes)
- 2) BEFORE CLASS:
  - a. I post all 13 signs around the classroom. I usually take a 12x18 piece of construction paper and fold it in half for each sign. Then, I tape the sign inside the colored construction paper. That way, students get to each station and lift the flap to view the problem.
  - b. I have a class set of the “Solve the Proportion” page made
- 3) When class starts, I have students get into pairs (sometimes I let them choose, other times I choose for them)
- 4) I let them know that their goal for the day is to become really good at solving proportions. Depending on the class, I will sometimes make it a friendly competition. The team that gets the most correct at the end gets a small prize. 😊
- 5) I let them know that each group will begin at a different station and when I say, “GO!”, they have 1:30-2:00 to figure out the answer to their problem.
- 6) After 1:30-2:00, I ring a bell and the students move in a clockwise direction around the room. They love it because it keeps them moving for most of the hour!
- 7) This continues until all groups have had a chance at each of the 13 stations.
- 8) Once the students have finished, we go back to our seats and go over the answers. If we’re doing it as a competition, I have students switch their form with another group for correcting. We then correct and discuss the answers as a class.
- 9) This is a great way to reinforce the math concepts we’ve been discussing in class!

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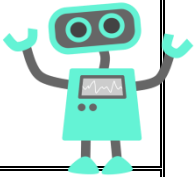
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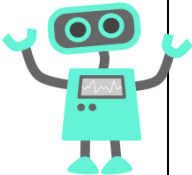
# Solve the Proportion Challenge!

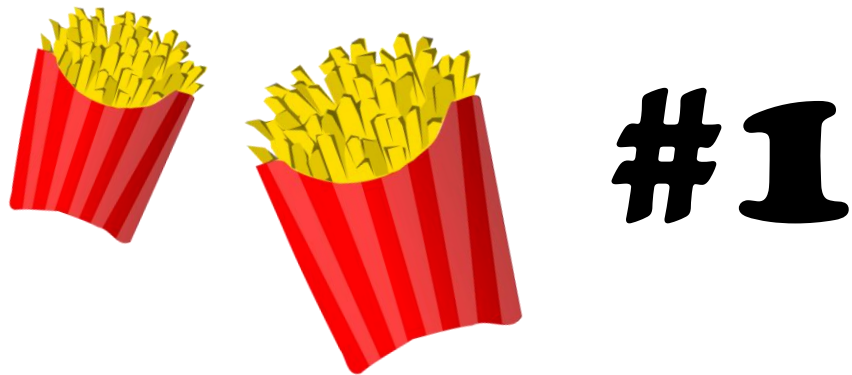


1)	2)	3)
4)	5)	6)
7) 	8)	9)
10)	11)	12) 
13)	SCORE: _____ /13	

# Solve the Proportion Challenge! **KEY**



<p>1) If there are 1200 calories in 8 oz. of French fries, how many calories are in 3 oz. of French fries?</p> $\frac{1200}{8} = \frac{x}{3} \quad x=450 \text{ calories}$	<p>2) Shelly's Sea Shell Store can sell 13 shells in 3 minutes. At that rate, how many can she sell in 24 minutes?</p> $\frac{13}{3} = \frac{x}{24} \quad x=104 \text{ shells}$	<p>3) You have a chocolate chip cookie recipe for 60 cookies that calls for 4 cups of chocolate chips! How many cups of chocolate chips are needed for 24 cookies?</p> $\frac{60}{4} = \frac{24}{c} \quad c=1.6 \text{ cups}$
<p>4) You come across a large rectangular door. The ratio of height to length is 2 to 25. If the door is 24 feet high, what is its length?</p> $\frac{2}{25} = \frac{24}{h} \quad h=300 \text{ feet}$	<p>5) Johnny noticed that his heart was racing after his track meet. It was beating 12 times every 5 seconds. How many times was it beating per minute (60 seconds)?</p> $\frac{12}{5} = \frac{b}{60} \quad b=144 \text{ times}$	<p>6) To make the perfect shade of green for one t-shirt, you need 4 parts blue dye to 3 parts yellow dye. How much of the blue dye do you need for 35 t-shirts? (there is an extra step to this one)</p> $\frac{4}{3} = \frac{4}{4+3} = \frac{4}{7} = \frac{b}{35}$ <p><math>b=20</math> parts blue dye</p>
<p>7) The ratio of the number of movies Greg has to the number of movies Lenny has is 5 to 7. Greg has 75 movies. How many movies do they have all together?</p> $\frac{5}{7} = \frac{75}{l} \quad l=105 \text{ movies}$ <p>Total # of movies = 180</p>	<p>8) At the Super School of Science, the ratio of boys to girls is 6:5. If there are 1500 boys, how many girls are there?</p> $\frac{6}{5} = \frac{1500}{g} \quad g=1250 \text{ girls}$	<p>9) You biked 15 miles in 45 minutes. At this rate, how many miles will you bike in 3 hours? (You will have to convert here!)</p> <p>3 hours = 180 min, so...</p> $\frac{15}{45} = \frac{m}{180} \quad m=60 \text{ miles}$
<p>10) At the local humane society, the number of cats to dogs adopted is 2 to 7. If 98 dogs were adopted last month, how many cats were adopted? How many cats and dogs were adopted last month?</p> $\frac{2}{7} = \frac{c}{98} \quad c=28 \text{ cats}$ <p>28 cats+98 dogs=126 adopted</p>	<p>11) On a map, 1 centimeter is equal to 65 miles. If two cities are 292.5 miles apart, how many centimeters apart will they be on the map?</p> $\frac{1}{65} = \frac{c}{292.5} \quad c=4.5 \text{ cm}$	<p>12) If you travel 705 miles in 5 hours, how many miles will you travel in 13 hours at this rate? The city you are traveling to is 2000 miles away; will you get there in 13 hours?</p> $\frac{705}{5} = \frac{m}{13} \quad m=1833 \text{ miles}$ <p>No</p>
<p>13) You are planning a party. The number of cupcakes to cookies is 4 to 15. If there are 300 cookies, how many cupcakes are there?</p> $\frac{4}{15} = \frac{c}{300} \quad c=80 \text{ cupcakes}$	<p>SCORE: _____/13</p> 	



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oz. of French fries, how  
many calories are in 3 oz. of  
French fries?**



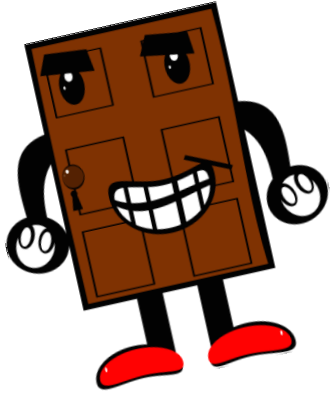
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**#3**

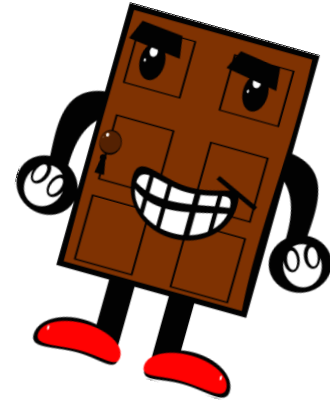


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**You come across a large rectangular door. The ratio of height to length is 2 to 25. If the door is 24 feet high, what is its length?**





**#5**



**Johnny noticed that his heart was racing after his track meet. It was beating 12 times every 5 seconds. How many times was it beating per minute (60 seconds)?**



**#6**



**To make the perfect shade of green for one t-shirt, you need 4 parts blue dye to 3 parts yellow dye. How much of the blue dye do you need for 35 t-shirts? (There is an extra step to this one)**



**The ratio of the number of movies Greg has to the number of movies Lenny has is 5 to 7. Greg has 75 movies. How many movies do they have all together?**



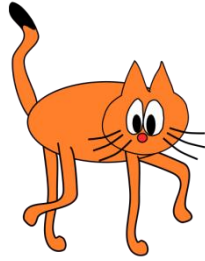
**At the Super School of Science, the ratio of boys to girls is 6:5. If there are 1500 boys, how many girls are there?**



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**You biked 15 miles in 45 minutes. At this rate, how many miles will you bike in 3 hours? (You will have to convert here!)**



**#10**



**At the local humane society, the number of cats to dogs adopted is 2 to 7. If 98 dogs were adopted last month, how many cats were adopted? How many cats and dogs were adopted last month?**



# #11

**On a map, 1 centimeter is equal to 65 miles. If two cities are 292.5 miles apart, how many centimeters apart will they be on the map?**





**#12**

**If you travel 705 miles in 5 hours, how many miles will you travel in 13 hours at this rate? The city you are traveling to is 2000 miles away; will you get there in 13 hours?**

# #13

**You are planning a party.  
The number of cupcakes to  
cookies is 4 to 15. If there are  
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