

STATION 1



Find the Greatest Common Factor of each of the following pairs:

a) 30, 50

b) 45, 60

c) 96, 144

STATION 2

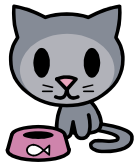


2. Find the Least Common Multiple of each of the following pairs:

a) 9, 12

b) 12, 30

c) 20, 50



STATION 3

Application problems finding the *Greatest Common Factor*

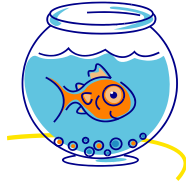
- a) There are 18 girls and 24 boys who want to participate in a Trivia Challenge. If each team must have the same ratio of girls and boys, what is the greatest number of teams that can enter? How many boys and girls will be on each team?
- b) The Ski Club members are preparing identical welcome kits for the new skiers. The Ski Club has 60 hand warmer packets and 48 foot warmer packets. What is the greatest number of identical kits they can prepare using all of the hand warmer and foot warmer packets?
- c) There are 435 representatives and 100 senators serving in the United States Congress. How many identical groups with the same number of representatives and senators could be formed from all of the Congress, if we want the largest groups possible?



STATION 4

Application problems finding the *Least Common Multiple*

- a) Hot dogs come packed 10 in a package. Hot dog buns come packed 8 in a package. If we want one hot dog for each bun for a picnic, with none left over, what is the least amount of each we need to buy?
- b) Starting at 6 a.m., a bus makes a stop at my street corner every 15 minutes. Also starting at 6 a.m., a taxi cab comes by every 12 minutes. What is the next time there will be a bus and a taxi at the corner at the same time?
- c) Two gears in a machine are aligned by a mark drawn from the center of one gear to the center of the other. If the first gear has 24 teeth and the second gear has 40 teeth, how many revolutions of the first gear are needed until the marks line up again?

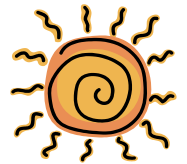


STATION 5

Application problems finding the *GCF* or *LCM*

- a) The food drive was a great success. There were 360 cans of vegetables, 480 boxes of cereal, and 640 boxes of pasta. Each care package must have the same number of vegetables, cereal, and pasta. What is the greatest number of care packages they can make?
- b) Three pigs entered a race around a track. Piggly takes 6 minutes to run one lap. Piglet takes 3 minutes to run one lap and it takes Wiggly 5 minutes to run one lap. If all three pigs begin the race at the same time, how many minutes will it take for all three pigs to be at the starting point again?
- c) Brooke is making identical balloon arrangements for a party. She has 32 maroon balloons, 24 white balloons, and 16 orange balloons. She wants each arrangement to have the same number of each color. What is the greatest number of arrangements that she can make if every balloon is used?

STATION 6



- a) Sam's favorite number is very special because it reminds him of the day his daughter, Sarah, was born. The factors of this number do not repeat and are all the prime numbers less than 12. What is Sam's number? When was Sarah born?
- b) Write two numbers, neither of which is 8, whose *GCF* is 8.
- c) Write two numbers, neither of which is 28, whose *LCM* is 28.