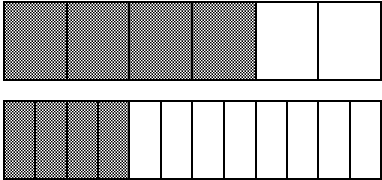# Math 6 - Unit 1: Number System Fluency

Study Guide for End of Unit Test

Name: _____

Class Period: 1   2   3   4   Date: _____

Solve the following problems. Show ALL your work on a separate piece of paper.

1) What does $4\frac{2}{5} \div \frac{7}{8}$ mean?

2) Why is no such thing as Greatest Common Multiple?

3) Find the greatest common factor of 24 and 60.

4) Find the least common multiple of 16 and 24.

5) $7260 \div 30 =$

6) $18.72 + 3.7 + 19 =$

7) $(6.9)(3.7) =$

8) $\frac{3}{7} \div \frac{1}{14} =$

9) $109 - 2.59 =$

10) $\frac{4}{5} \div 1\frac{1}{5} =$

11) Aletta buys bird food every 9 days and hamster food every 12 days. If she buys both kinds of pet food today, in how many days will she next buy both kinds of pet food?

12) Daniel threw the football $15\frac{1}{3}$ yards over 5 plays. How many yards did he average per play?

13) Hamburgers are sold in packages of 6 and buns are sold in packages of 8. What is the least number of packages of each that can be bought to make hamburger sandwiches (one burger and one bun) with no buns or hamburgers left over?

14) Ticket sales for a concert totaled $120,400. Tickets for the concert cost $25 each. How many tickets were sold?

15) Which division sentence is shown in the model below?

16) Erin has $18 to buy school supplies. She buys 5 folders that are $0.55 each (including tax). She buys 1 binder that costs $12.25. She spends the remaining money buying pencils that are $0.25 each (including tax). If she has no money left over, how many pencils did she buy?

17) A shelf has a width of $4\frac{3}{5}$ inches. If CDs have a width of $\frac{1}{3}$ inch, how many CDs can be placed on the shelf?

18) Using the information from problem 17, explain how you solved the problem and computed the answer.

19) A roller coaster train holds 40 passengers. If there are 315 people in line to ride, how many times will the train have to go for everyone to be able to ride?

20) What topic do you need to study the most? LCM, GCF, Long Division, Operations with Decimals or Dividing Fractions?
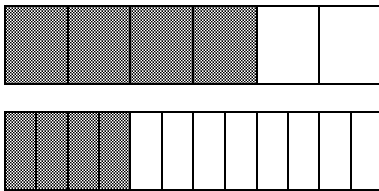
Math 6 - Unit 1: Number System Fluency

Name: _____

Study Guide for End of Unit Test

Class Period: 1   2   3   4   Date: _____

Solve the following problems. Show ALL your work on a separate piece of paper.

1) What does $4\frac{2}{5} \div \frac{7}{8}$ mean? **You are finding out how many times $\frac{7}{8}$ goes into $4\frac{2}{5}$.**

2) Why is no such thing as Greatest Common Multiple? **Multiples go on forever. There is no GREATEST Multiple.**

3) Find the greatest common factor of 24 and 60. **12**

4) Find the least common multiple of 16 and 24. **48**

5) 7260 ÷ 30 = **242**

6) 18.72 + 3.7 + 19 = **41.43**

7) (6.9)(3.7) = **25.53**

8) $\frac{3}{7} \div \frac{1}{14} =$ **6**

9) 109 – 1.48 = **106.41**

10) $\frac{4}{5} \div 1\frac{1}{5} =$ **$\frac{2}{3}$**

11) Aletta buys bird food every 9 days and hamster food every 12 days. If she buys both kinds of pet food today, in how many days will she next buy both kinds of pet food? **36 Days**

12) Daniel threw the football $15\frac{1}{3}$ yards over 5 plays. How many yards did he average per play? **$\frac{46}{15}$**

13) Hamburgers are sold in packagess of 6 and buns are sold in packages of 8. What is the least number of packages of each that can be bought to make hamburger sandwiches (one burger and one bun) with no buns or hamburgers left over? **To make the 24 sandwiches, you need 4 packages of burgers and 3 packages of buns.**

14) Ticket sales for a concert totaled $120,400. Tickets for the concert cost $25 each. How many tickets were sold? **4816 Tickets**

15) Which division sentence is shown in the model below? **$\frac{4}{6} \div \frac{4}{12} = 2$**

16) Erin has $18 to buy school supplies. She buys 5 folders that are $0.55 each (including tax). She buys 1 binder that costs $12.25. She spends the remaining money buying pencils that are $0.25 each (including tax). If she has no money left over, how many pencils did she buy? **12 Pencils**

17) A shelf has a width of $4\frac{3}{5}$ inches. If CDs have a width of $\frac{1}{3}$ inch, how many CDs can be placed on the shelf? **13 CDs**

18) Using the information from problem 17, explain how you solved the problem and computed the answer. **I divided $4\frac{3}{5}$ by $\frac{1}{3}$ and did not include the remainder in my answer because I can't put part of a cd on a shelf.**

19) A roller coaster train holds 40 passengers. If there are 315 people in line to ride, how many times will the train have to go for everyone to be able to ride? **8 Times**

20) What topic do you need to study the most? LCM, GCF, Long Division, Operations with Decimals or Dividing Fractions? **Answers will vary.**