

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?
- 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) Sophia is making gift packs to cheer up kids at the local hospital. If she has 20 coloring books and 15 packs of cards, what is the greatest number of gift packs can she can make so that each one has the same number of coloring books and packs of cards with none left over?
- 12) Daniel threw the football $15\frac{1}{3}$ yards over 5 plays. Divide to find out how many yards he averaged 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) Pumpkins are sold for \$1.43 per pound. If Christian bought a pumpkin and spent \$18.59, how many pounds was his pumpkin?
- 16) Erin has \$18 to buy groceries to make lemonade. She buys 5 pounds of sugar that is \$0.55 per pound (including tax). She buys 1 pitcher that costs \$12.25. She spends the remaining money buying lemons that are \$0.25 each (including tax). If she has no money left over, how many lemons 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?

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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) $7260 \div 30 =$ **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) Sophia is making gift packs to cheer up kids at the local hospital. If she has 20 coloring books and 15 packs of cards, what is the greatest number of gift packs she can make so that each one has the same number of coloring books and packs of cards with none left over? **5 Packs**
- 12) Daniel threw the football $15\frac{1}{3}$ yards over 5 plays. Divide to find out how many yards he averaged per play? **$\frac{46}{15}$ yards or $3\frac{1}{15}$ yards**
- 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? **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) Pumpkins are sold for \$1.43 per pound. If Christian bought a pumpkin and spent \$18.59, how many pounds was his pumpkin? **13 pounds**
- 16) Erin has \$18 to buy groceries to make lemonade. She buys 5 pounds of sugar that is \$0.55 per pound (including tax). She buys 1 pitcher that costs \$12.25. She spends the remaining money buying lemons that are \$0.25 each (including tax). If she has no money left over, how many lemons did she buy? **12 Lemons**
- 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.**