STUDY GUIDE: Fraction and Decimal Operations   Name: _____ Date: _____ Block: ___

Find the value of each expression. Write your answer in the blank in simplest form. **Show your work.**

1) $16\frac{1}{2} \cdot 5\frac{5}{6} =$ _____

3) $4\frac{1}{6} \div 2\frac{1}{3} =$ _____

2) $3\frac{5}{8} \cdot \frac{4}{5} =$ _____

4) $14 \div \frac{3}{5} =$ _____

5) Connor has $43\frac{1}{5}$ gallons of paint. He plans on using $2\frac{2}{5}$ gallons on each room. How many rooms will he be able to paint?

_____

6) Maahi adds $1\frac{5}{7}$ cups of granola to her yogurt every day for breakfast. If 12 cups of granola are in a full carton, how many days will it take Maahi to eat all the granola in the carton?

_____

7) Zoe uses $\frac{4}{9}$ of a 5 pound bag of sugar to bake cookies. How many pounds of sugar did she use?

_____

8) Sam has $6\frac{1}{4}$ cups of flour in her flour jar. She uses $\frac{3}{5}$ of the jar to bake a cake. How much flour is left in the jar?

_____

9) $76.3 + 6.79 =$ _____

10) $72 - 12.71 =$ _____

11) 7.8 x 3.94 = _____   12) 50.544 ÷ 8.1 = _____

13) Mrs. Jones wants to know how much money she is spending on cable TV each year. If her monthly bill is $149.89, how much money will she spend on cable TV in a whole year?

_____

14) Carpeting costs $8.49 a yard. If Jan buys 18.3 yards, how much will it cost her? Round your answer to the nearest cent (hundredth).

_____

15) Ellen wanted to buy the following items:
   • A jacket for $39.49
   • A shirt for $25.65
   • A phone case for $35.95
   What is her total cost for these three items? Does Ellen have enough money to buy all three items if she has $100?

_____

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_____

16) Mr. Erb's homeroom paid $901 for their math books this year. If he has 34 students in his homeroom, what was the cost per book?

_____

17) Mrs. Reynolds has a ribbon that is 15.2 yards long. She wants to cut the ribbon into pieces that are 0.8 yards long to make hair bows. How many hair bows can she make?

_____

18) The sixth grade at Community House Middle School is going on a field trip. There are 620 students in sixth grade. If each bus can hold 38 students, how many buses will Ms. Dugan need to reserve for us? Explain your reasoning in words.

_____

19) Solve this problem using the common denominator method.

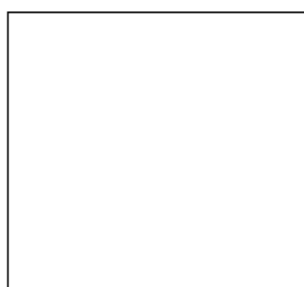$$\frac{1}{4} \div \frac{3}{5} =$$

20) Solve the problem. Show how to solve using the model.

$$\frac{2}{3} \div \frac{3}{4} =$$

Bonus: Draw a model to represent the problem, then evaluate.

$$\frac{1}{2} \cdot \frac{3}{4} =$$

Bonus: Write and solve the problem represented by this area model.