

Fraction division tasks:

name: _____

Part 1: Partitive division and the invert and multiply algorithm

1. a. Write a partitive division interpretation (sentences) for $2 \div \frac{1}{3}$

b. Draw a partitive division diagram and use it to solve.

2. a. Write a partitive division interpretation (sentences) for $\frac{6}{7} \div \frac{2}{5}$

b. Draw a partitive division diagram and use it to solve.

c. Write your solution from (b) as a division followed by a multiplication. Write a sentence that uses your diagram to explain why you are dividing, and why you are multiplying.

3. Explain why $\frac{1}{3}$ of 16 would be the answer to $16 \div 3$

4. a. Write a partitive division interpretation (sentences) for $\frac{5}{4} \div \frac{3}{7}$

b. Draw a partitive division diagram and use it to solve.

c. Write your solution from (b) as multiplication by a unit fraction followed by multiplication by a whole number. Write a sentence that uses your diagram to explain why you are multiplying by the unit fraction, and why you are multiplying by the whole number.

5. a. Write a partitive division interpretation (sentences) for $\frac{9}{4} \div \frac{5}{3}$

b. Draw a partitive division diagram.

c. Explain why the answer shown by the diagram will be $\frac{3}{5}$ of $\frac{9}{4}$

6. a. Write a partitive division interpretation (sentences) for $\frac{9}{4} \div \frac{2}{5}$

b. Draw a partitive division diagram.

c. Explain why the answer shown by the diagram will be $\frac{5}{2}$ of $\frac{9}{4}$

Part 2: Measurement division with common denominators. Use the online tool:

http://nlvm.usu.edu/en/nav/frames_asid_265_g_3_t_1.html?open=activities&from=grade_g_3.html

7. a. Write a measurement division interpretation (sentences) for $\frac{7}{12} \div \frac{1}{6}$

b. Using the online tool, and/or by drawing a number line, solve this problem. Explain (in words) the fractional part of the answer

8. a. Write a measurement division interpretation (sentences) for $\frac{5}{2} \div \frac{2}{3}$

b. Using the online tool, and/or by drawing a number line, solve this problem. Explain (in words) the fractional part of the answer

9. a. Solve by drawing a number line.

Tyler has $\frac{3}{4}$ yard of string. It uses $\frac{1}{5}$ yard of string to wind once around a soup can. How many times will Tyler's string wind around a soup can?

b. If the fractional part of the answer tells a fraction of the distance around the can, what fraction would that be?

c. If the fractional part of the answer tells a fraction of a yard of string, what fraction would that be?