

EMA
 Fraction Application and Matrices Review

Name Nomani

1.) Dean bought a $1\frac{1}{2}$ lb bag of pens and pencils for his EMA classes, where $\frac{3}{7}$ of it was pens.

(A) How much of the bag are pencils? $\frac{4}{7}$

(B) How many pounds of pencils were in the bag?

$$1\frac{1}{2} \cdot \frac{4}{7} \rightarrow \frac{3}{2} \cdot \frac{4}{7} = \frac{12}{14} = \frac{6}{7}$$

2.) Luke had 5 yards of string. He needs $\frac{4}{5}$ of a yard to make a loop for his yo-yo. How many loops can he make for his yo-yo? 6 loops



3.) Logan ate $\frac{1}{3}$ of a medium cheese pizza. Sookie ate $\frac{3}{5}$ of the leftover pizza. How much of a whole pizza did Sookie eat? LCD: 12



$$\frac{6}{12} = \boxed{\frac{1}{2}}$$

4.) Rory and 3 of her friends made brownies.

- Lorelei ate $\frac{5}{16}$ of it. $\frac{5}{16} \cdot 48 = 15$
- Rory ate $\frac{1}{3}$ of what was left. $\frac{1}{3} \cdot 33 = 11$
- Lane ate $\frac{1}{2}$ of what was left. $\frac{1}{2} \cdot 22 = 11$
- Paris ate the rest. 11

(A) How many total brownie pieces are there? 48

(B) How many pieces did each person eat?

Lorelei 15 Rory 11 Lane 11 Paris 11

orange									
brown								red	
black						lt. green			
dk. green					magenta				
yellow				yellow					
blue									W
magenta			magenta				red		
lt. green		lt. green		red		red			
W	W	W	W	W	W	W	W	W	W
orange									

5.) Using the Cuisenaire Rods chart, left, answer the following questions.

Hint: Use the white pieces to help you

(A) Let the orange rod be the whole, magenta is what fraction of it?

$$\frac{8}{10} = \frac{4}{5}$$

(B) Let yellow rod be the whole, what color is $1\frac{1}{5}$ of it?

dk. green

(C) Dark green is what fraction of the longest color?

$$\frac{6}{10} = \frac{3}{5}$$

(D) Let red rod be the whole, what color is $2\frac{1}{2}$ of it?

yellow

(E) Let brown rod be the whole, what color is $\frac{3}{8}$ of it?

lt. green

6.) A monkey has 75 peaches. Each day, he keeps a fraction of his peaches, giving the rest away and eating one. He tried to keep an account on leaves of how many he was keeping, but mixed them up! Here are the fractions of peaches he decided to keep:

$$\frac{1}{2} \quad \frac{1}{4} \quad \frac{3}{4} \quad \frac{3}{5} \quad \frac{5}{6} \quad \frac{11}{15}$$

In which order did he use the fractions so that he was left with just one peach at the end?

$$75 \cdot \frac{11}{15} = 55 \text{ kept} - 1 \text{ ate} = 54$$

$$54 \cdot \frac{5}{6} = 45 \text{ kept} - 1 \text{ ate} = 44$$

$$44 \cdot \frac{3}{4} = 33 \text{ kept} - 1 \text{ ate} = 32$$

$$32 \cdot \frac{1}{2} = 16 \text{ kept} - 1 \text{ ate} = 15$$

$$15 \cdot \frac{3}{5} = 9 \text{ kept} - 1 \text{ ate} = 8$$

$$8 \cdot \frac{1}{4} = 2 \text{ kept} - 1 \text{ ate} = \boxed{1}$$

$$\boxed{\frac{11}{15}, \frac{5}{6}, \frac{3}{4}, \frac{1}{2}, \frac{3}{5}, \frac{1}{4}}$$