## 1. Calculate:

a) $\frac{1}{8}+\frac{3}{4}=$
b) $\frac{2}{5}+\frac{3}{8}=$
c) $\frac{5}{12}-\frac{1}{4}=$
d) $\frac{7}{12} \cdot \frac{12}{13}=$
e) $\frac{6}{7} \cdot \frac{7}{36}=$
2. I got 34 binders and 40 loose leaf paper sets. What is the greatest number of students to whom I can distribute evenly the binders and paper sets?
3. An apple worm was eating an apple. On the first day, it ate a half of the apple, on the second day it ate a half of the rest, and on the third day it ate a half of the remaining apple again. On the fourth day, it ate whatever was left of the apple. What part of the apple did it eat on the fourth day?

4. Find missing numbers so that you get equivalent fractions: Here is YouTube video explaining equivalent fractions if you need a reminder https:///www.youtube.com/watch?v=GMGxG8inf6E
a) $\frac{-7}{6}=\frac{71}{21}=\frac{}{18}$
b) $\frac{5}{12}=\frac{55}{}=\frac{30}{60}$
c) $\frac{2}{}=\frac{}{15}=\frac{20}{100}=\frac{}{35}$

## 5. Find the length of a segment $A B$ if:

a. $\frac{2}{5}$ of its length is equal to 3 cm
b. $\frac{3}{4}$ of its length is equal to 13 m
c. 8 cm is $\frac{5}{7}$ of its length
d. 10 cm is $\frac{3}{10}$ of its length
6. Move 3 sticks to create 3 squares. All squares must be equal in size.

8. Remove 4 matchsticks to leave only 5 squares All squares must be equal in size.

7. Review of LCM and GCF and Venn Diagrams
a) Write a set A of prime factors for 1024
b) Write a set B of prime factors for 512
c) Show Venn Diagram of prime factors for 1024 and 512 in the rectangle on the right

d) Write the set $\mathrm{C}=\mathrm{A} \cap \mathrm{B}$
e) Write the set $\mathrm{D}=\mathrm{A} \cup \mathrm{B}$

f) Determine GCF $(1024,512)$ and LCM $(1024,512)$
8. Plot points on the plane of coordinates:
$\boldsymbol{A}(-1,8)$
B(6,1)
C $(6,6)$
D (-6,-2).

Draw segments $\boldsymbol{A B}$ and $\boldsymbol{C D}$ and find coordinates of the point $\mathbf{F}$ at the intersection of segments $A B$ and CD (use graphing paper and attach it to this homework).

