

2. What addition equation is being modeled by the shaded part of the picture? 2. \_\_\_\_



4. What addition equation is being modeled by the fraction strips and number line?



4.



What addition equation is being modeled by the pattern blocks below? 9.



10. What subtraction equation is being modeled by the shaded parts of the circles below?

10.





8. \_\_\_

[25 pts]

mult.of7:7,14,21,28,... mult.of4: 4,8,12,16,20,24,28,...

1 Add or subtract Write your answer in simplest fo

Mult. of 12:12(24),32,...

1. Add or subtract. Write your answer in simplest form.  
A. 
$$\frac{4x^2}{5} \frac{7}{10}$$
B.  $\frac{8}{9} \frac{1}{2^2 \times 9}$ 
 $= \frac{9}{10} + \frac{1}{10}$ 
 $= \frac{16}{10} - \frac{1}{10}$ 
 $= \frac{16}{18} - \frac{9}{18}$ 
 $\frac{15 \div 5}{12 \times 2}$ 
 $\frac{15 \div 5}{12 \times 2}$ 
 $\frac{10 \div 5}{12} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2} \frac{1}{2} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2} \frac{1}{2} \frac{1}{2}$ 
 $\frac{10}{12} \frac{1}{2} \frac{1$ 

2. Add or subtract. Write your answer in simplest form as a mixed number when possible. [4 pts]



A. Explain what you classmate did wrong.

B. Draw a picture to show how to find the sum correctly. (Patterns blocks, fraction circles or fraction strips & number line.)

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







= 334

4. Find two fractions that have a difference of  $\frac{1}{6}$  when the fractions have unlike denominators. [2 pts]

Since, 
$$\frac{5}{6} - \frac{4}{6} = \frac{1}{6}$$
 just reduce the fraction  $\frac{4}{6}$   
So,  $\frac{5}{6} - \frac{2}{3} = \frac{1}{6}$  is a Sample answer.

5. Show workings and write a final statement. [4 pts]  
For an upcoming math test Missy studied 
$$1\frac{2}{3}$$
 hours Sunday night, and  $2\frac{1}{2}$  hours Monday night.  
A. How long did she study interval test? Write your answer as a mixed number in simplest form.  
 $|\frac{2}{3} \frac{2}{22} 2\frac{1\times3}{2\times3} = |\frac{4}{6} + 2\frac{3}{6} = 3 + \frac{2}{6} = 3 + |\frac{1}{6} = 4\frac{1}{6}$   
She Spent  $4\frac{1}{6}$  h Studying for math.  
B. How muct longer did she study Monday night compared to Sunday night?  
 $2\frac{1}{2} - |\frac{2}{3}$   
She Spent  $5\frac{1}{6}$  h longer  
 $\frac{5\times3}{2\times3} \frac{5\times2}{3\times2}$   
Shudying on Monday.  
 $= \frac{15}{6} - \frac{10}{6}$   
 $= \frac{5}{6}$ 

## 6. Show workings and write a final statement.

Mult.

During elections for student council president,  $\frac{1}{5}$  of the students voted for Bill,  $\frac{1}{4}$  voted for Mary and  $\frac{3}{10}$ voted for John.

A. What fraction of the total student population voted?  

$$\frac{1 \times 4}{5} + \frac{1 \times 5}{4} + \frac{3 \times 2}{10 \times 2} = \frac{4}{20} + \frac{5}{20} + \frac{6}{20} = \frac{15 \cdot 5}{20 \cdot 5} = \frac{3}{4}$$

$$\frac{\text{Mull. of 5: 5, 10, 15, 20}}{\text{Mull. of 4} : 4, 8, 12, 16, 20} \dots \qquad \frac{3}{4} \text{ of the Student population Voted.}$$

$$\frac{3}{4} \text{ of the Student population Vote}$$

$$\left|-\frac{3}{4}=\frac{1}{4}\right|$$
 So,  $\frac{1}{4}$  of the population did not vote.

[4 pts]