

Name: _____

Part A: Multiple Choice: Write the letter of the best answer in the space at the right. [10 pts]

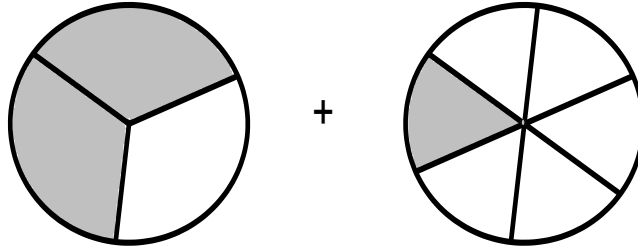
1. What addition equation is being modeled by the shaded part of the picture? 1. _____

A. $\frac{2}{3} + \frac{1}{6} = \frac{3}{9}$

B. $\frac{2}{3} + \frac{1}{6} = \frac{3}{6}$

C. $\frac{2}{3} + \frac{1}{6} = \frac{5}{6}$

D. $\frac{2}{3} + \frac{1}{6} = \frac{3}{3}$



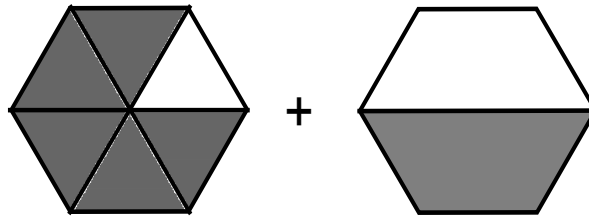
2. What addition equation is being modeled by the shaded part of the picture? 2. _____

A. $\frac{5}{6} + \frac{1}{2} = \frac{6}{8}$

B. $\frac{5}{6} + \frac{1}{2} = \frac{6}{6}$

C. $\frac{5}{6} + \frac{1}{2} = \frac{8}{6}$

D. $\frac{5}{6} + \frac{1}{2} = \frac{8}{2}$

3. Which fraction is equivalent to $\frac{6}{8}$? 3. _____

A. $\frac{6}{16}$

B. $\frac{12}{24}$

C. $\frac{3}{4}$

D. $\frac{12}{8}$

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

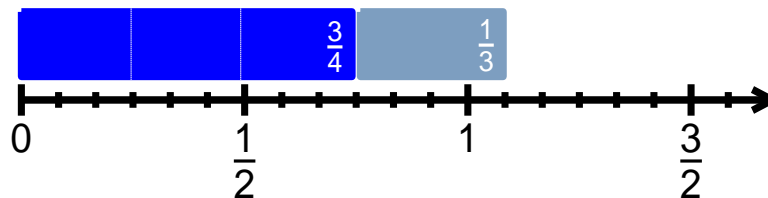
4. ____

A. $\frac{3}{4} + \frac{1}{3} = \frac{4}{12}$

B. $\frac{3}{4} + \frac{1}{3} = \frac{4}{7}$

C. $\frac{3}{4} + \frac{1}{3} = \frac{10}{12}$

D. $\frac{3}{4} + \frac{1}{3} = \frac{13}{12}$



5. What is the lowest common denominator for the pair of fractions $\frac{5}{6}$ and $\frac{3}{8}$?

5. ____

- A. 2
- B. 6
- C. 24
- D. 48

6. Which improper fraction is equal to $3\frac{5}{6}$?

6. ____

- A. $\frac{21}{6}$
- B. $\frac{23}{6}$
- C. $\frac{23}{5}$
- D. $\frac{35}{6}$

7. What subtraction equation is being modeled by the fraction strip and number line?

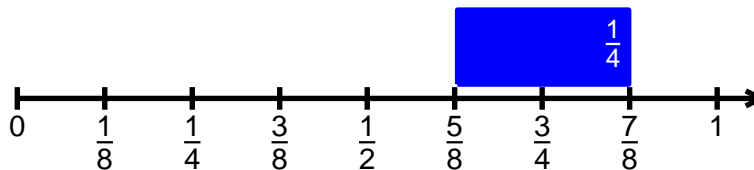
7. ____

A. $\frac{1}{4} - \frac{5}{8} = \frac{7}{8}$

B. $\frac{1}{4} - \frac{7}{8} = \frac{5}{8}$

C. $\frac{5}{8} - \frac{1}{4} = \frac{7}{8}$

D. $\frac{7}{8} - \frac{1}{4} = \frac{5}{8}$



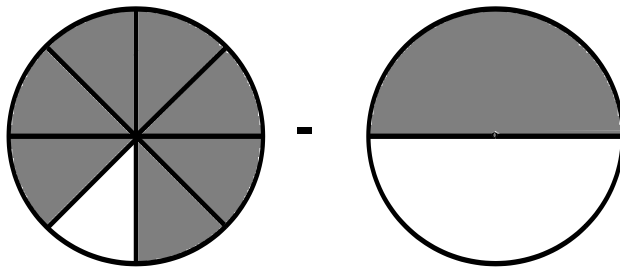
8. What subtraction equation is being modeled by the shaded parts of these fraction circles? 8. ____

A. $\frac{7}{8} - \frac{1}{2} = \frac{3}{8}$

B. $\frac{7}{8} - \frac{1}{2} = \frac{6}{8}$

C. $\frac{7}{8} - \frac{1}{2} = \frac{6}{6}$

D. $\frac{7}{8} - \frac{1}{2} = \frac{6}{2}$



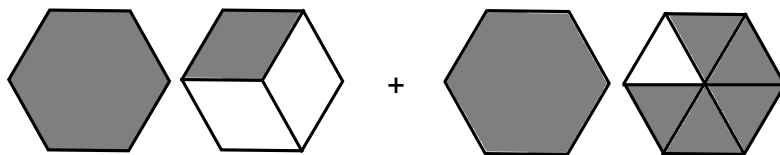
9. What addition equation is being modeled by the pattern blocks below? 9. ____

A. $1\frac{1}{3} + 1\frac{5}{6} = 3\frac{1}{6}$

B. $1\frac{1}{3} + 1\frac{5}{6} = 2\frac{6}{9}$

C. $1\frac{1}{3} + 1\frac{5}{6} = 2\frac{6}{6}$

D. $1\frac{1}{3} + 1\frac{5}{6} = 2\frac{7}{3}$



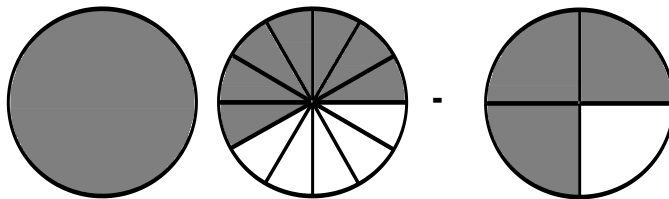
10. What subtraction equation is being modeled by the shaded parts of the circles below? 10. ____

A. $1\frac{7}{12} - \frac{3}{4} = \frac{10}{12}$

B. $1\frac{7}{12} - \frac{3}{4} = 1\frac{4}{8}$

C. $1\frac{7}{12} - \frac{3}{4} = 1\frac{4}{12}$

D. $1\frac{7}{12} - \frac{3}{4} = \frac{14}{12}$



Part B. Completion: Complete all questions. Show detailed workings.

[25 pts]

1. Add or subtract. Write your answer in simplest form.

[8 pts]

A. $\frac{4}{5} + \frac{7}{10}$

B. $\frac{8}{9} - \frac{1}{2}$

C. $\frac{3}{8} + \frac{5}{12}$

D. $\frac{6}{7} - \frac{3}{4}$

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

A. $2\frac{1}{3} + 1\frac{3}{4}$

B. $4\frac{1}{6} - 2\frac{2}{3}$

3. Your classmate incorrectly tells you that $2\frac{1}{2} + 1\frac{1}{4} = 3\frac{2}{6}$. [3 pts]

A. Explain what your classmate did wrong.

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

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

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 in total for her math test? Write your answer as a mixed number in simplest form.

B. How much longer did she study Monday night compared to Sunday night?

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

[4 pts]

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?

B. What fraction of the total student population did not vote?