

Test Review

Day 1

Warm-up

Simplify

(a) $\frac{4}{32}$

$$\begin{array}{l} 4 \text{ (circled)} \\ 1 \times 4 \\ 2 \times 2 \\ 32 \\ 1 \times 32 \\ 4 \times 8 \text{ (circled)} \end{array}$$

$$\frac{4 \div 4}{32 \div 4} = \frac{1}{8}$$

(b) $\frac{8}{60}$

$$\begin{array}{l} 8 \\ 1, 2, 4, 8 \text{ (circled)} \\ 60 \\ 15, 30, 60, 4 \text{ (circled)} \\ 2, 1 \end{array}$$

$$\frac{8 \div 4}{60 \div 4} = \frac{2}{15}$$

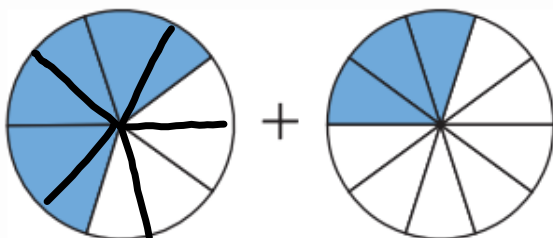
(c) $\frac{16}{56}$

$$\begin{array}{l} 16 \\ 1, 2, 4, 8, 16, 4 \text{ (circled)} \\ 56 \\ 1, 2, 7, 56, 28 \text{ (circled)} \end{array}$$

$$\frac{16 \div 8}{56 \div 8} = \frac{2}{7}$$

$$\begin{array}{r} 10 \\ 1 \times 10 \\ 2 \times 5 \end{array}$$

1. Use fraction circles. Model this picture, then find the sum.



$$\frac{3}{5} + \frac{3}{10}$$

$$\frac{9}{10}$$

2. On Saturday, Howie hiked for $\frac{5}{12}$ h in the morning and $\frac{3}{6}$ h in the afternoon. What fraction of an hour did Howie spend hiking?

How long did we walk all together?

$$\frac{5}{12} + \frac{3}{6}$$

$$\frac{5}{12} + \frac{3 \times 2}{6 \times 2}$$

$$\frac{5}{12} + \frac{6}{12}$$

$$\frac{11}{12}$$

$$12: \textcircled{12}, 24$$

$$6: 6, \textcircled{12}$$

4. Add.

a) $\frac{2}{8} + \frac{3}{8}$

c) $\frac{3}{4} + \frac{2}{6}$

$$(a) \frac{2}{8} + \frac{3}{8}$$

$$\frac{5}{8}$$

b) $\frac{2}{3} + \frac{1}{6}$

d) $\frac{1}{2} + \frac{2}{5}$

$$(b) \frac{2}{3} + \frac{1}{6}$$

3: 3, 6, 9

6: 6, 12

$$\frac{2 \times 2}{3 \times 2} + \frac{1}{6}$$

$$\frac{4}{6} + \frac{1}{6}$$

$$\frac{5}{6}$$

4: 4, 8, 12, 16

6: 6, 12

$$(c) \frac{3}{4} + \frac{2}{6}$$

$$\frac{3 \times 3}{4 \times 3} + \frac{2 \times 2}{6 \times 2}$$

$$\frac{9}{12} + \frac{4}{12}$$

$$\frac{13}{12} = 1 \frac{1}{12}$$

$$12 \overline{) 13}$$

$$\underline{-12}$$

$$1$$

2: 2, 4, 6, 8, 10, 12

5: 5, 10

$$(d) \frac{1}{2} + \frac{2}{5}$$

$$\frac{1 \times 5}{2 \times 5} + \frac{2 \times 2}{5 \times 2}$$

$$\frac{5}{10} + \frac{4}{10}$$

$$\frac{9}{10}$$

Freida has $\frac{3}{4}$ of a bottle of ginger ale.

She needs $\frac{1}{2}$ of a bottle of ginger ale for her fruit punch.

How much will be left in the bottle after Freida makes the punch?

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

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

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

$$\frac{1}{4}$$

$$4: \textcircled{4}, 8$$

$$2: 2, \textcircled{4}$$

Copy and replace each \square with a digit, to make each equation true.

Try to do this more than one way.

a) $\frac{2}{3} - \frac{\square}{\square} = \frac{1}{3}$

b) $\frac{\square}{\square} - \frac{1}{5} = \frac{3}{5}$

c) $\frac{\square}{3} - \frac{2}{\square} = \frac{1}{6}$

$$\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$$

(b) $\frac{4}{5} - \frac{1}{5} = \frac{3}{5}$

(c) $\frac{4}{3} - \frac{2}{3} = \frac{1}{6}$

$$\frac{3}{3} - \frac{2}{3} = \frac{1}{6}$$

$$\frac{6}{6} - \frac{4}{6} = \frac{1}{6}$$

Assessment Focus Kelly had $\frac{3}{4}$ of a tank of gas at the beginning of the week.

At the end of the week, Kelly had $\frac{1}{8}$ of a tank left.

a) Did Kelly use more or less than $\frac{1}{2}$ of a tank? Explain.

b) How much more or less than $\frac{1}{2}$ of a tank did Kelly use?

Show your work.

a) Which of these differences is greater than $\frac{1}{2}$?

i) $\frac{5}{6} - \frac{2}{3}$

3 : 3, 6
6 : 6

$$\frac{5}{6} - \frac{2 \times 2}{3 \times 2}$$

$$\frac{5}{6} - \frac{4}{6}$$

$$\frac{1}{6} < \frac{1}{2}$$

ii) $\frac{5}{6} - \frac{1}{2}$

6 : 6
2 : 2, 4, 6

$$\frac{5}{6} - \frac{1 \times 3}{2 \times 3}$$

$$\frac{5}{6} - \frac{3}{6}$$

$$\frac{2 \div 2}{6 \div 2} = \frac{1}{3}$$

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

iii) $\frac{5}{6} - \frac{1}{6}$

$$\frac{5}{6} - \frac{1}{6}$$

$$\frac{4}{6}$$

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

Add.

Use fraction circles.

area model

Draw a picture to show each sum.

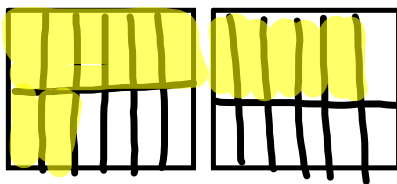
a) $\frac{8}{12} + \frac{5}{12}$

b) $\frac{3}{4} + \frac{2}{8}$

c) $\frac{1}{4} + \frac{2}{3}$

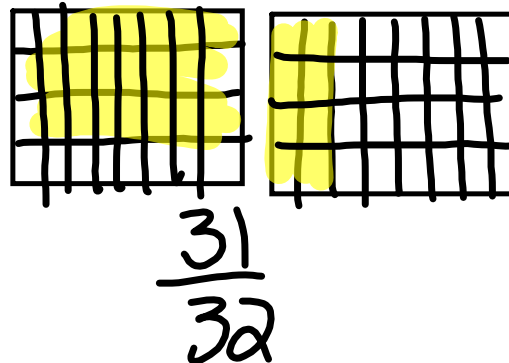
d) $\frac{1}{10} + \frac{3}{5}$

(a)



$$\frac{13}{12} = 1\frac{1}{12}$$

(b)



Add.

a) $\frac{1}{5} + \frac{3}{5}$

c) $\frac{2}{3} + \frac{3}{10}$

b) $\frac{1}{2} + \frac{3}{7}$

d) $\frac{3}{5} + \frac{1}{4}$

Subtract.

a) $\frac{4}{5} - \frac{1}{5}$

b) $\frac{5}{6} - \frac{1}{3}$

c) $\frac{11}{12} - \frac{1}{2}$

Subtract.

a) $\frac{9}{10} - \frac{2}{5}$

c) $\frac{8}{5} - \frac{1}{4}$

b) $\frac{7}{3} - \frac{5}{6}$

d) $\frac{9}{4} - \frac{2}{3}$

The gas tank in Eddie's car is $\frac{5}{8}$ full.
He uses $\frac{1}{4}$ tank of gas to run his
errands. What fraction of a tank of
gas is left?

each sum.

a) $6\frac{1}{3} + \frac{1}{3}$

c) $2\frac{3}{10} + 3\frac{1}{5}$

b) $1\frac{5}{12} + \frac{1}{6}$

d) $5\frac{1}{4} + 1\frac{2}{5}$

Add.

a) $3\frac{5}{6} + \frac{4}{6}$

c) $7\frac{3}{10} + 2\frac{4}{5}$

b) $4\frac{3}{8} + \frac{1}{4}$

d) $2\frac{5}{9} + 5\frac{2}{3}$

Danielle mows lawns as a part-time job. On Monday, Danielle spent $1\frac{3}{4}$ h mowing lawns.

On Wednesday, she spent $1\frac{7}{8}$ h mowing lawns.

How much time did she spend mowing lawns over the 2 days?

Add or subtract as indicated.

a) $2\frac{2}{3} + 1\frac{1}{2}$

b) $3\frac{1}{3} - 1\frac{7}{10}$

c) $2\frac{1}{6} + 4\frac{7}{8}$

d) $3\frac{1}{2} - 2\frac{3}{4}$

1. Add or subtract.

Draw a picture to show each sum or difference.

Write each sum or difference in simplest form.

a) $\frac{7}{5} + \frac{3}{5}$

b) $\frac{13}{10} - \frac{2}{3}$

c) $\frac{11}{12} - \frac{8}{12}$

d) $\frac{4}{9} + \frac{7}{6}$

2. Find two fractions that have a sum of $\frac{3}{5}$.

a) The fractions have like denominators.

b) The fractions have unlike denominators.

3. Find two fractions that have a difference of $\frac{1}{4}$.

a) The fractions have like denominators.

b) The fractions have unlike denominators.

4. Add or subtract.

a) $6\frac{3}{8} + 2\frac{1}{5}$

b) $3\frac{1}{10} - 1\frac{4}{5}$

5. Lana does yard work.

The table shows the approximate time for each job.

For one Saturday, Lana has these jobs:

- mow 3 small lawns
- mow 1 large lawn
- mow lawn/tidy yard in 2 places
- plant annuals in 1 place

Lana needs travel time between jobs,
and a break for lunch.

Do you think she will be able to do all the jobs? Justify your answer.

Job	Time
Mow small lawn	$\frac{1}{2}$ h
Mow large lawn	$\frac{3}{4}$ h
Mow lawn/tidy yard	$1\frac{1}{2}$ h
Plant annuals	$2\frac{1}{2}$ h

6. Write each fraction as the sum of two different unit fractions.

a) $\frac{3}{4}$

b) $\frac{5}{8}$

7. A fraction is written on each side of two counters.

All the fractions are different.

The counters are flipped and the fractions are added.

Their possible sums are: $1, 1\frac{1}{4}, \frac{7}{12}, \frac{5}{6}$

Which fractions are written on the counters?

Explain how you found the fractions.