

Section B: Practice Problems

1. a. Find the value of each sum. Explain or show your reasoning.

i.
$$\frac{5}{6} + \frac{2}{6}$$

ii.
$$\frac{5}{6} + \frac{2}{3}$$

b. How were the calculations the same? How were they different?

(From Unit 6, Lesson 8.)



2. a. Explain why the expressions
$$\frac{2}{3} - \frac{7}{12}$$
 and $\frac{8}{12} - \frac{7}{12}$ are equivalent.

b. How is the expression
$$\frac{8}{12} - \frac{7}{12}$$
 helpful to find the value of $\frac{2}{3} - \frac{7}{12}$?

(From Unit 6, Lesson 9.)

3. Find the value of each expression. Explain or show your reasoning.

a.
$$\frac{1}{4} + \frac{1}{5}$$

b.
$$\frac{10}{9} - \frac{3}{4}$$

(From Unit 6, Lesson 10.)



4. a. Find the value of $2\frac{3}{4} - \frac{1}{3}$. Explain or show your reasoning.

b. Find the value of $3\frac{2}{7} - \frac{4}{5}$. Explain or show your reasoning.

(From Unit 6, Lesson 11.)



- 5. Jada picked $4\frac{2}{3}$ cups of blackberries. Andre picked $3\frac{5}{8}$ cups of blackberries.
 - a. How many cups of blackberries did Jada and Andre pick together? Explain or show your reasoning.

b. How many more cups of blackberries did Jada pick than Andre? Explain or show your reasoning.

(From Unit 6, Lesson 12.)

6. Find the value of each expression. Explain or show your reasoning.

a.
$$\frac{7}{8} + \frac{4}{13}$$

b.
$$\frac{7}{8} - \frac{3}{20}$$

(From Unit 6, Lesson 13.)

7. Here are the lengths of some pieces of ribbon measured in inches:

| $3\frac{1}{4}$ | $4\frac{1}{8}$ | $3\frac{6}{8}$ | $3\frac{1}{8}$ | $2\frac{5}{8}$ | $3\frac{2}{4}$ | $3\frac{1}{4}$ |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| $3\frac{7}{8}$ | $4\frac{1}{8}$ | $3\frac{1}{2}$ | $2\frac{7}{8}$ | $4\frac{1}{8}$ | $3\frac{3}{4}$ | $3\frac{2}{8}$ |

a. Complete the line plot with the ribbon lengths.

b. What is the sum of the lengths of the ribbons that measure more than 4 inches? Explain or show your reasoning.

(From Unit 6, Lesson 14.)



8. Han is making a line plot of the seedlings his class grew. This is what he has done so far.

Growing Plants



Use this information to complete the line plot. Explain or show your reasoning.

- ° There are 15 seedlings altogether.
- $^{\circ}$ The tallest seedling is $2\frac{1}{8}$ taller than the shortest seedling.
- $^{\circ}$ There are 3 seedlings of the shortest height.

(From Unit 6, Lesson 15.)

9. Exploration

a. Put the numbers 2, 3, 4, and 5 in the four boxes so that the expression is as



b. Put the numbers 2, 3, 4, and 5 in the four boxes so that the expression is as





10. Exploration

Make a line plot of seedling heights so that each of these statements is true.

- There are 12 measurements.
- $^\circ\,$ The largest measurement is $2\frac{3}{8}$ inches more than the smallest measurement.
- $^{\rm o}\,$ The sum of the measurements is $18\frac{3}{8}$ inches.

Explain how you made the line plot.