



How to Administer the Quick Check:

- The Quick Check consists of two parts: an Instructor portion which includes solutions and a Student portion with problems for each concept.
- **Your student need only complete the Quick Check problems for the concepts for which you responded **Unsure**.**
- Have your student complete the Quick Check items independently. You may attempt to clarify the wording of a question, but you should not provide hints about how to solve a problem.
- Return to the Question Block when you have checked your student's work.
- *You should now be able to answer **Yes** or **No** for each question.*
- Click **Next** to go to the next screen.

6.1

Does my student understand the relationship between the numerator, the denominator, and the overall value of a fraction?

6.1a

Given the fraction $\frac{4}{7}$:

- One unit has been divided into how many equal parts?

7

The denominator indicates how many equal parts the unit has been divided into.

- How many of those parts are present or in use?

4

The numerator indicates how many of those equal parts are present or being used.

6.1b

Given the fraction $\frac{6}{8}$:

- One unit has been divided into how many equal parts?

8

The denominator indicates how many equal parts the unit has been divided into.

- How many of those parts are present or in use?

6

The numerator indicates how many of those equal parts are present or being used.



6.1

Does my student understand the relationship between the numerator, the denominator, and the overall value of a fraction?

6.1c

Compare using $<$ or $>$. Then explain how you know which fraction is greater: $\frac{5}{6}$ $\frac{5}{7}$

$$\frac{5}{6} > \frac{5}{7}$$

The smaller the denominator, the fewer equal parts the unit has been divided into. Therefore, each part is larger. The numerator 5 is the same, indicating the same number of parts are present in both fractions. Since the parts will be larger when divided into sixths versus sevenths, $\frac{5}{6}$ is greater.

6.1d

Compare using $<$ or $>$. Then explain how you know which fraction has the least value: $\frac{3}{5}$ $\frac{3}{4}$

$$\frac{3}{5} < \frac{3}{4}$$

The greater the denominator, the more equal parts the unit has been divided into. Therefore, each part is smaller. The numerator 3 is the same, indicating the same number of parts are present in both fractions. Since the parts will be smaller when divided into fifths versus fourths, $\frac{3}{5}$ is less.



6.2

Can my student fluently add, subtract, multiply, and divide fractions with different denominators?

6.2a

Express the answer in the lowest terms possible (reduce): $\frac{3}{4} + \frac{1}{5} = \underline{\hspace{2cm}}$

$$\frac{19}{20}$$

$$\frac{3 \times 5}{4 \times 5} + \frac{1 \times 4}{5 \times 4} = \frac{15}{20} + \frac{4}{20} = \frac{19}{20}$$

6.2a

Express the answer in the lowest terms possible (reduce): $\frac{2}{3} - \frac{1}{6} = \underline{\hspace{2cm}}$

$$\frac{1}{2}$$

$$\frac{2 \times 2}{3 \times 2} - \frac{1 \times 1}{6 \times 1} = \frac{4}{6} - \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$$

OR

$$\frac{2 \times 2}{3 \times 2} - \frac{1}{6} = \frac{4}{6} - \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$$



6.2

Can my student fluently add, subtract, multiply, and divide fractions with different denominators?

6.2c

Express the answer in the lowest terms possible (reduce): $\frac{2}{5} \times \frac{5}{6} =$ _____

$$\frac{1}{3}$$

$$\frac{2}{5} \times \frac{5}{6} = \frac{10}{30} = \frac{1}{3}$$

OR

$$\frac{12}{18} \times \frac{8}{63} = \frac{1}{3}$$

6.2d

Express the answer in the lowest terms possible (reduce): $\frac{2}{3} \div \frac{5}{8} =$ _____

$$1 \frac{1}{15}$$

$$\frac{16}{24} \div \frac{15}{24} = \frac{16 \div 15}{1} = 1 \frac{1}{15}$$

OR

$$\frac{2}{3} \div \frac{5}{8} = \frac{2}{3} \times \frac{8}{5} = \frac{16}{15} = 1 \frac{1}{15}$$



6.3

Can my student confidently solve word problems involving fractions?

6.3a

**Kara has a ribbon $\frac{2}{3}$ of a yard long.
How many pieces of ribbon $\frac{1}{6}$ of a yard long can she cut from it?**

4 pieces

$$\frac{2}{3} \div \frac{1}{6} = \frac{12}{18} \div \frac{3}{18} = \frac{12 \div 3}{1} = 4$$

OR

$$\frac{2}{3} \times \frac{6}{1} = \frac{12}{3} = \frac{4}{1} = 4$$

6.3b

**Marsha ate $\frac{3}{7}$ of the almonds and Jimmy ate $\frac{1}{6}$ of them.
What part of the almonds have been eaten?**

 $\frac{25}{42}$ of the almonds

$$\frac{3}{7} + \frac{1}{6} = \frac{3 \times 6}{7 \times 6} + \frac{1 \times 7}{6 \times 7} = \frac{18}{42} + \frac{7}{42} = \frac{25}{42}$$



How to complete the Quick Check:

- You only need to complete the problems your parent or instructor assigns.

6.1

6.1a

Given the fraction $\frac{4}{7}$:

- One unit has been divided into how many equal parts?

- How many of those parts are present or in use?

6.1b

Given the fraction $\frac{6}{8}$:

- One unit has been divided into how many equal parts?

- How many of those parts are present or in use?



6.1

6.1c

Compare using $<$ or $>$. Then explain how you know which fraction is greater: $\frac{5}{6}$ $\frac{5}{7}$

6.1d

Compare using $<$ or $>$. Then explain how you know which fraction has the least value: $\frac{3}{5}$ $\frac{3}{4}$

6.2

6.2a

Express the answer in the lowest terms possible (reduce): $\frac{3}{4} + \frac{1}{5} = \underline{\hspace{2cm}}$

6.2a

Express the answer in the lowest terms possible (reduce): $\frac{2}{3} - \frac{1}{6} = \underline{\hspace{2cm}}$



6.2

6.2c

Express the answer in the lowest terms possible (reduce): $\frac{2}{5} \times \frac{5}{6} = \underline{\hspace{2cm}}$

6.2d

Express the answer in the lowest terms possible (reduce): $\frac{2}{3} \div \frac{5}{8} = \underline{\hspace{2cm}}$



6.3

6.3a

**Kara has a ribbon $\frac{2}{3}$ of a yard long.
How many pieces of ribbon $\frac{1}{6}$ of a yard long can she cut from it?**

6.3b

**Marsha ate $\frac{3}{7}$ of the almonds and Jimmy ate $\frac{1}{6}$ of them.
What part of the almonds have been eaten?**