Instructor Quick Check: Question Block 6

How to Administer the Quick Check:

- The Quick Check consists of two parts: an Instruction 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 **Submit** 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.

© Demme Learning 0726-07292026

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: $\frac{5}{6} \bigcirc \frac{5}{7}$**

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

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: $\frac{3}{5} \bigcirc \frac{3}{4}$**

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

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.

© Demme Learning 0726-07292026

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

6.2a **Solve. Simplify the answer to the lowest terms: $\frac{3}{4} + \frac{1}{5} =$**

$\frac{19}{20}$

$\frac{15}{20} + \frac{4}{20} = \frac{19}{20}$

6.2b **Solve. Simplify the answer to the lowest terms: $\frac{2}{3} - \frac{1}{6} =$**

$\frac{1}{2}$

$\frac{2\times6}{3\times6} - \frac{1\times3}{6\times3} = \frac{12}{18} - \frac{3}{18} = \frac{9}{18} = \frac{1}{2}$

or $\frac{2\times2}{3\times2} - \frac{1}{6} = \frac{4}{6} - \frac{1}{6} = \frac{9}{18} = \frac{1}{2}$

© Demme Learning 0726-07292026

6.2 Can my student fluently add, subtract, multiply, and divide fractions or mixed numbers with different denominators?

6.2c **Solve. Simplify the answer to the lowest terms: $\frac{2}{5} \times \frac{5}{6} =$**

$\frac{1}{3}$

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

OR

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

6.2d **Solve. Simplify the answer to the lowest terms: $\frac{2}{3} \div \frac{5}{8} =$**

$1\frac{1}{15}$

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

OR

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

© Demme Learning 0726-07292026

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

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

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

$$\frac{18}{42} + \frac{7}{42} = \frac{25}{42}$$

© Demme Learning 0726-07292026

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?**

© Demme Learning 0726-07292026

6.1

6.1c **Compare using <, >, or =. Then explain how you know which fraction is greater: $\frac{5}{6} \bigcirc \frac{5}{7}$**

6.1d **Compare using <, >, or =. Then explain how you know which fraction has the least value: $\frac{3}{5} \bigcirc \frac{3}{4}$**

© Demme Learning 0726-07292026

6.2

6.2a **Solve. Simplify the answer to the lowest terms:** $\frac{3}{4} + \frac{1}{5} =$

6.2b **Solve. Simplify the answer to the lowest terms:** $\frac{2}{3} - \frac{1}{6} =$

© Demme Learning 0726-07292026

6.2

6.2c **Solve. Simplify the answer to the lowest terms:** $\frac{2}{5} \times \frac{5}{6} =$

6.2d **Solve. Simplify the answer to the lowest terms:** $\frac{2}{3} \div \frac{5}{8} =$

© Demme Learning 0726-07292026

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?

© Demme Learning 0726-07292026