

Key

## Grade 5 Module 3 End-of-Module Study Guide

1. Add or subtract. When possible, write your answer as a mixed number and simplify your answer if possible.

a.  $5\frac{4}{5} - 2\frac{2}{3}$

$$\begin{aligned} & \textcircled{5, 10, 15} \\ & \textcircled{3, 6, 9, 12, 15} = 5\left(\frac{4 \times 3}{5 \times 3}\right) - 2\left(\frac{2 \times 5}{3 \times 5}\right) \\ & = 5\frac{12}{15} - 2\frac{10}{15} \\ & = 3\frac{2}{15} \end{aligned}$$

b.  $\frac{3}{8} + \frac{3}{7}$

$$\begin{aligned} & \textcircled{8, 16, 24, 32, \dots} \textcircled{56} \\ & \textcircled{7, 14, 21, 28, \dots} \textcircled{66} \end{aligned}$$

$$\begin{aligned} & = \left(\frac{3 \times 7}{8 \times 7}\right) + \left(\frac{3 \times 8}{7 \times 8}\right) \\ & = \frac{21}{56} + \frac{24}{56} \\ & = \frac{45}{56} \end{aligned}$$

c.  $\frac{2}{3} + 1\frac{1}{10}$

$$\textcircled{3, 6, 9, 12, 15, 18, 21, 24, 27, 30}$$

$$\begin{aligned} & \textcircled{10, 20, 30} \\ & = \left(\frac{2 \times 10}{3 \times 10}\right) + \left(1\frac{1 \times 3}{10 \times 3}\right) \\ & = \frac{20}{30} + 1\frac{3}{30} \\ & = 1\frac{23}{30} \end{aligned}$$

d.  $8\frac{3}{4} - 5\frac{5}{6}$

$$\begin{aligned} & \textcircled{4, 8, 12, 14,} \\ & \textcircled{6, 12} \end{aligned}$$

$$\begin{aligned} & = 8\left(\frac{3 \times 3}{4 \times 3}\right) - 5\left(\frac{5 \times 2}{6 \times 2}\right) \\ & = 8\frac{9}{12} - 5\frac{10}{12} \\ & = 7\frac{21}{12} - 5\frac{10}{12} \\ & = 2\frac{11}{12} \end{aligned}$$

2. Is the expression greater than 1 or less than 1? Circle the correct answer for each expression.

a.  $\frac{1}{2} + \frac{5}{12}$

greater than 1

less than 1

b.  $\frac{3}{8} + \frac{4}{9}$

greater than 1

less than 1

3. Is the expression greater than  $\frac{1}{2}$  or less than  $\frac{1}{2}$ ? Circle the correct answer for each expression.

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

greater than  $\frac{1}{2}$

less than  $\frac{1}{2}$

b.  $\frac{3}{7} - \frac{1}{8}$

greater than  $\frac{1}{2}$

less than  $\frac{1}{2}$

