

Learning Outcomes Covered:

3E: I can divide rational numbers.

CONTENT Assessment Questions:

1. Determine each quotient.

$$\begin{aligned} \text{a) } & \left(-\frac{2}{3}\right) \div \left(\frac{5}{6}\right) \\ & = \frac{-2}{\cancel{3}_1} \times \frac{\cancel{6}^2}{5} \\ & = \frac{-2 \times 2}{1 \times 5} = \frac{-4}{5} \end{aligned}$$

$$\begin{aligned} \text{b) } & \left(-\frac{3}{4}\right) \div \left(-\frac{5}{2}\right) \\ & = \frac{-3}{\cancel{4}_2} \times \frac{\cancel{2}^{-1}}{5} \\ & = \frac{-3 \times -1}{2 \times 5} = \frac{3}{10} \end{aligned}$$

$$\begin{aligned} \text{c) } & 3\frac{1}{2} \div \left(-2\frac{1}{6}\right) \\ & = \frac{7}{2} \div \left(-\frac{13}{6}\right) \\ & = \frac{7}{\cancel{2}_1} \times \frac{\cancel{6}^3}{-13} \\ & = \frac{21}{-13} \\ & = -1\frac{8}{13} \end{aligned}$$

$$\begin{aligned} \text{d) } & \left(-2\frac{1}{5}\right) \div \left(-4\frac{3}{4}\right) \\ & = \frac{-11}{5} \times \frac{4}{-19} \\ & = \frac{-44}{-95} \\ & = \frac{44}{95} \end{aligned}$$

3. A diver descends 3.2 m in 5 min. What was his average rate of descent in metres per minute?

$$\begin{aligned} & -3.2 \div 5 \\ & = -0.64 \text{ m/min.} \end{aligned}$$

4. Use a calculator to determine each quotient. Round each answer to the nearest hundredth.

a) $16.4 \div (-5.5)$

$= -2.98$

b) $(-0.98) \div 12.4$

$= -0.08$

CURRICULAR COMPETENCIES Questions:

1. Mr. Lee and Mr. Lui used to go to high school together. Mr. Lee lived EAST of the school and Mr. Lui lived WEST of the school. One day, they both had to run home from school to get their missing assignment. Mr. Lui ran 1.5 km to his home in 6.5 minutes. Mr. Lee ran 2000 m to his home in 12 minutes. (RA, CnRf)

a. Write division statements using positive and negative rational numbers to represent each teacher's average speed in METERS per MINUTE. You need to decide what the positive and negative numbers represent. (How do you find average speed again....remember Science 8?)

$2000 \div 12 = 166.67 \text{ m/min.}$

$-1500 \div 6.5 = 230.77 \text{ m/min.}$

East is positive
and West is negative.

b. Who do you think was the better athlete in school? Give reasons for your answer.

Mr. Lui because the average speed is faster than Mr. Lee.

ONGOING LEARNING ACTIVITIES:

CORE: Page 134: Curricular Competencies: 15, 16
Content: 3, 4, 6, 8, 9, 11, 12

ADVANCED: Page 136: 19, 21