Learning Outcomes Covered:

3D: I can multiply rational numbers.

CONTENT Assessment Questions:

1. Determine each product.

a) $\frac{2}{5}\times\left(-\frac{1}{2}\right) = \frac{1\times-1}{5\times1} = \frac{-1}{5}$

b) $\left(-\frac{3}{4}\right)\times\left(-\frac{4}{5}\right) = \frac{(-3)\times(-1)}{1\times5} = \frac{3}{5}$

c) $\left(\frac{10}{7}\right)\left(-\frac{13}{8}\right) = \frac{5\times(-13)}{7\times4} = \frac{-65}{28} = -2\frac{9}{28}$

d) $\left(-4\frac{3}{5}\right)\left(-2\frac{5}{12}\right) = \frac{-23}{5}\times\frac{-29}{12} = \frac{667}{60} = 11\frac{7}{60}$

23 × 29 = 207 + 46 = 667

2. Predict the sign of each product. Determine each product.

a) $(-1.2)\times0.3$ = −0.36 (1.2 × 0.3 = 0.36)

b) $0.34\times(-0.5)$ = −0.17 (0.34 × 0.5 = 0.170)

c) $(-0.6)\times(-0.15)$ = 0.09 (0.15 × 0.6 = 0.090)

3. From November 12th to November 21st, the temperature in Burnaby, B.C. dropped an average of 1.7°C each day. Suppose the temperature on the morning of November 12th was 11.4°C. What was the temperature on the morning of November 21st?

21 − 12 = 9

$11.4-(1.7\times9)$

$=11.4-15.3$

$=-3.9^{\circ}C$

15.3 − 11.4 = −3.9

CURRICULAR COMPETENCIES Questions:

1. A positive rational number is multiplied by a negative rational number. Is it possible that the product is closer to 0 than either of the numbers being multiplied? Include examples and explain your reasoning. (RA)

Yes, for example $\frac{1}{2} \times \frac{-1}{2} = \frac{-1}{4}$.

$\frac{-1}{4}$ is closer to 0 than those 2 numbers.

ONGOING LEARNING ACTIVITIES:

CORE: Page 127: Curricular Competencies: 3, 4, 6, 14
Content: 5, 7, 9, 10, 12, 15
ADVANCED: Page 129: 16, 18