

**Learning Outcomes Covered:****3F:** I can use order of operations to evaluate expressions.**CONTENT Assessment Questions:**

1. Evaluate. Show all steps.

$$\begin{aligned}
 \text{a) } & \frac{1}{2} \times \left( \frac{-1}{2} \right) + \frac{5}{6} \\
 & = \frac{1 \times (-1)}{2 \times 1} + \frac{5}{6} \\
 & = \frac{-1}{2} + \frac{5}{6} \\
 & = \frac{-2}{6} + \frac{5}{6} \\
 & = \frac{3}{6} = \frac{1}{2}
 \end{aligned}$$

$$\begin{aligned}
 \text{b) } & \frac{3}{8} - \frac{9}{4} \div \left[ \left( \frac{-5}{4} \right) + \left( \frac{-1}{10} \right) \right] \\
 & = \frac{3}{8} - \frac{9}{4} \div \left[ -\frac{25}{20} - \frac{2}{20} \right] \\
 & = \frac{3}{8} - \frac{9}{4} \div \left[ \frac{-27}{20} \right] \\
 & = \frac{3}{8} - \left( \frac{9}{4} \times \frac{20}{-27} \right) \\
 & = \frac{3}{8} - \left( \frac{1 \times 5}{1 \times (-3)} \right) \\
 & = \frac{3}{8} + \frac{5}{3} \\
 & = \frac{9}{24} + \frac{40}{24} \\
 & = \frac{49}{24} = 2 \frac{1}{24}
 \end{aligned}$$

$$\begin{aligned}
 \text{c) } & \frac{5}{9} - \left( -\frac{1}{6} \right) + \left[ 4 \frac{1}{4} + \left( -3 \frac{1}{2} \right) \right]^2 \div \frac{2}{5} \\
 & = 1 \frac{10}{18} + 2 \frac{3}{18} + \left[ 3 \frac{5}{4} - 3 \frac{2}{4} \right]^2 \div \frac{2}{5} \\
 & = 3 \frac{13}{18} + \left[ \frac{3}{4} \right]^2 \div \frac{2}{5} \\
 & = 3 \frac{13}{18} + \frac{9}{16} \div \frac{2}{5} \rightarrow 3 \frac{613}{288} \\
 & = 3 \frac{13}{18} + \frac{9}{16} \times \frac{5}{2} = 5 \frac{37}{288} \\
 & = 3 \frac{13}{18} + \frac{45}{32} \\
 & = 3 \frac{208}{288} + \frac{405}{288}
 \end{aligned}$$

$$\begin{aligned}
 \text{d) } & \frac{9.6 \times 12.6 - 5.1 + (-1.7) - 0.36}{(-2.9) \div 1.45 - 1.2} \\
 & = \frac{120.96 + 3 - 0.36}{-2 - 1.2} \\
 & = \frac{123.96 - 0.36}{-3.2} \\
 & = \frac{123.6}{-3.2} \\
 & = -38.625
 \end{aligned}$$

**CURRICULAR COMPETENCIES Questions:**

1. Warren's father mowed  $\frac{1}{8}$  of the lawn. Warren mowed  $\frac{2}{3}$  of the lawn that was left by his father. Warren's two younger brothers finished mowing the rest of the lawn. (US)

a) What is the fraction of the entire lawn that Warren mowed?

$$1 - \frac{1}{8} = \frac{7}{8} \rightarrow \text{after Warren's father mowed the lawn.}$$

$$\frac{2}{3} \times \frac{7}{8} = \frac{7}{12} \text{ of the lawn}$$

b) What fraction of the entire lawn did each of Warren's brothers mow?

$$1 - \frac{1}{8} - \frac{7}{12} = \frac{24}{24} - \frac{3}{24} - \frac{14}{24}$$

$$= \frac{7}{24}$$

2. Find the errors in this solution. Write a correct solution. (RA)

$$1.7 \times (4.6 - 2.1) + 3.5 \times 1.3$$

$$= 1.7 \times 2.5 + 3.5 \times 1.3 \rightarrow = 4.25 + 4.55$$

$$= 1.7 \times 6 \times 1.3$$

$$= 13.26$$

$$= 8.8$$

**ONGOING LEARNING ACTIVITIES:**

CORE: Page 140: Curricular Competencies: 8, 10, 14, 17

Content: 4, 7ac, 9, 12, 13, 14, 16

ADVANCED: Page 142: 19, 20, 21