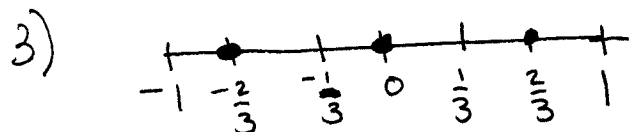


Unit 2 Review

1) $\frac{5}{9}$

2) $2\frac{3}{4}$ and $\frac{11}{4}$



4) $|\frac{2}{3}| = \frac{2}{3}$

5) $\frac{5}{8}$

6) $-\frac{6}{11}$

7) $\frac{4}{7} \cdot \frac{1}{4} = \boxed{\frac{16}{28}}$

8) $-\frac{35}{40} \div 5 = \boxed{-\frac{7}{8}}$

9) $-\frac{6}{1} \cdot \frac{9}{9} = \boxed{-\frac{54}{9}}$

10) $-\frac{15}{60} = \frac{-3 \cdot 5 \cdot 1}{2 \cdot 3 \cdot 2 \cdot 5}$

$= -\frac{3}{3} \cdot \frac{5}{5} \cdot \frac{1}{2 \cdot 2}$

$= \boxed{-\frac{1}{4}}$

11) $-\frac{21}{70} = -\frac{7}{7} \cdot \frac{3}{10}$
 $= \boxed{-\frac{3}{10}}$

12) $\frac{3x \cdot x}{3 \cdot 5 \cdot x} = \frac{3}{3} \cdot \frac{x}{x} \cdot \frac{x}{5}$
 $= \boxed{\frac{x}{5}}$

13) $-\frac{2}{3} \cdot \frac{7}{9} = \boxed{-\frac{14}{27}}$

14) $(-\frac{15}{28})(-\frac{35}{3})$
 $= \frac{3 \cdot 5}{7 \cdot 4} \cdot \frac{7 \cdot 5}{3} = \frac{3}{3} \cdot \frac{7}{7} \cdot \frac{5 \cdot 5}{4}$
 $= \boxed{\frac{25}{4}}$

15) $2\frac{1}{3} \cdot (-3\frac{1}{2})$
 $= \frac{7}{4} \cdot -\frac{7}{2} = \boxed{-\frac{49}{8}}$

16) $\frac{4}{7} \div \frac{20}{21} = \frac{4}{7} \cdot \frac{21}{20} = \frac{4}{20} \cdot \frac{21}{7}$
 $= \frac{1}{5} \cdot \frac{3}{1} = \boxed{\frac{3}{5}}$

17) $-\frac{2}{3} \div 4$
 $= -\frac{2}{3} \div \frac{4}{1} = -\frac{2}{3} \cdot \frac{1}{4} = -\frac{2}{12} = \boxed{-\frac{1}{6}}$

18) $5\frac{1}{3} \div -4\frac{1}{3} = \frac{16}{3} \div -\frac{13}{3}$
 $= \frac{16}{3} \cdot -\frac{3}{13} = \boxed{-\frac{16}{13}}$

19) $\frac{3202}{\frac{1}{3}02} = 32 \cdot 3 = \boxed{96 \text{ servings}}$

20) $78 \cdot \frac{1}{2} = \boxed{39 \text{ people}}$

Unit 2 Review

Continued

$$21) \cancel{A = \frac{1}{2}} \quad A = \left(\frac{5}{7} \text{ in}\right) \left(\frac{3}{10} \text{ in}\right)$$

$$= \frac{5 \cdot 3}{7 \cdot 10} \text{ in}^2 = \boxed{\frac{3}{14} \text{ in}^2}$$

$$22) -\frac{3}{5} - \frac{2}{5} = -\frac{5}{5} = \boxed{-1}$$

$$23) -\frac{4}{7} - \left(-\frac{1}{7}\right) = -\frac{4}{7} + \frac{1}{7} = \boxed{-\frac{3}{7}}$$

$$24) -\frac{5}{8} + \frac{1}{8} = -\frac{4}{8} = \boxed{-\frac{1}{2}}$$

$$25) \frac{1}{4} - \frac{3}{8} = \frac{1}{4} \cdot \frac{2}{2} - \frac{3}{8} \\ = \frac{2}{8} - \frac{3}{8} = \boxed{-\frac{1}{8}}$$

$$26) -\frac{2}{3} + \frac{1}{6} \\ = -\frac{2}{3} \cdot \frac{2}{2} + \frac{1}{6} = -\frac{4}{6} + \frac{1}{6} = -\frac{3}{6} \\ = \boxed{-\frac{1}{2}}$$

$$27) -4 + \frac{2}{3} \\ = -\frac{4}{1} + \frac{2}{3} = -\frac{4}{1} \cdot \frac{3}{3} + \frac{2}{3} \\ = -\frac{12}{3} + \frac{2}{3} = \boxed{-\frac{10}{3}}$$

$$28) -3\frac{1}{4} - 7\frac{7}{8} \\ = -\frac{13}{4} - \frac{63}{8} \\ = -\frac{13}{4} \cdot \frac{2}{2} - \frac{63}{8} \\ = -\frac{26}{8} - \frac{63}{8} \\ = \boxed{-\frac{89}{8}}$$

$$30) 2 - \left(-\frac{2}{3}\right)$$

$$= \frac{2}{1} + \frac{2}{3}$$

$$= \frac{2}{1} \cdot \frac{3}{3} + \frac{2}{3}$$

$$= \frac{6}{3} + \frac{2}{3} = \boxed{\frac{8}{3}}$$

$$31) \frac{1}{8} + \frac{3}{4}$$

$$= \frac{1}{8} + \frac{3}{4} \cdot \frac{2}{2}$$

$$= \frac{1}{8} + \frac{6}{8} = \boxed{\frac{7}{8}}$$

~~$$32) \left(\frac{2}{3}\right)^3 = \left(\frac{2}{3}\right)\left(\frac{2}{3}\right)\left(\frac{2}{3}\right) = \boxed{\frac{4}{9}}$$~~

$$32) \left(\frac{2}{3}\right)^3 = \left(\frac{2}{3}\right)\left(\frac{2}{3}\right)\left(\frac{2}{3}\right) = \boxed{\frac{8}{27}}$$

$$33) \left(-\frac{5}{6}\right)^2 = \left(-\frac{5}{6}\right)\left(-\frac{5}{6}\right) = \boxed{\frac{25}{36}}$$

$$34) -\frac{7^2}{3} = \boxed{-\frac{49}{3}}$$

Unit 2 Review Continued

$$\begin{aligned} 35) \quad \frac{1}{2} \div \frac{3}{4} \cdot \frac{3}{7} \\ = \frac{1}{2} \cdot \frac{4}{3} \cdot \frac{3}{7} \\ = \frac{2}{3} \cdot \frac{3}{7} \\ = \boxed{\frac{2}{7}} \end{aligned}$$

$$\begin{aligned} 36) \quad \frac{5}{7} + \frac{1}{7} \cdot \frac{5}{3} \\ = \frac{5}{7} + \frac{5}{21} \\ = \frac{5}{7} \cdot \frac{3}{3} + \frac{5}{21} \\ = \frac{15}{21} + \frac{5}{21} \\ = \boxed{\frac{20}{21}} \end{aligned}$$

$$\begin{aligned} 37) \quad \left(\frac{3}{8} - \frac{3}{4}\right)^2 + \frac{1}{2} \cdot 6 \\ = \left(\frac{3}{8} - \frac{3}{4} \cdot \frac{2}{2}\right)^2 + \frac{1}{2} \cdot 6 \\ = \left(\frac{3}{8} - \frac{6}{8}\right)^2 + \frac{1}{2} \cdot 6 \\ = \left(-\frac{3}{8}\right)^2 + \frac{1}{2} \cdot 6 \\ = \frac{9}{64} + \frac{3}{1} \\ = \frac{9}{64} + \frac{3}{1} \cdot \frac{64}{64} \\ = \frac{9}{64} + \frac{192}{64} = \boxed{\frac{201}{64}} \end{aligned}$$

$$\begin{aligned} 38) \quad \frac{\frac{2}{5}}{\frac{3}{10}} &= \frac{2}{5} \div \frac{3}{10} = \frac{2}{5} \cdot \frac{10}{3} \\ &= \frac{2 \cdot 2}{3} = \boxed{\frac{4}{3}} \end{aligned}$$

$$\begin{aligned} 39) \quad \frac{\frac{3}{2} + \frac{1}{4}}{3} &= \frac{\frac{3}{2} \cdot \frac{2}{2} + \frac{1}{4}}{3} \\ &= \frac{\frac{6}{4} + \frac{1}{4}}{3} \\ &= \frac{\frac{7}{4}}{3} = \frac{7}{4} \div \frac{3}{1} = \frac{7}{4} \cdot \frac{1}{3} \\ &= \boxed{\frac{7}{12}} \end{aligned}$$

$$\begin{aligned} 40) \quad \frac{\frac{1}{4}}{3 - \frac{1}{3}} &= \frac{\frac{1}{4}}{\frac{3}{1} \cdot \frac{3}{3} - \frac{1}{3}} \\ &= \frac{\frac{1}{4}}{\frac{9}{3} - \frac{1}{3}} \\ &= \frac{\frac{1}{4}}{\frac{8}{3}} \\ &= \frac{1}{4} \div \frac{8}{3} = \frac{1}{4} \cdot \frac{3}{8} \\ &= \boxed{\frac{3}{32}} \end{aligned}$$