

## Unit 3 Exam Review

$$\begin{aligned} \text{MC.} \\ 7.) \quad -\frac{5}{2} - \left(-\frac{9}{5}\right) &= -\frac{25}{10} + \frac{18}{10} \\ &= -\frac{7}{10} \end{aligned}$$

$$\begin{aligned} 8.) \quad -4\frac{2}{3} - 2\frac{1}{2} &= -\frac{14}{3} - \frac{5}{2} \\ &= -\frac{28}{6} - \frac{15}{6} \\ &= -\frac{43}{6} \\ &= -7\frac{1}{6} \end{aligned}$$

$$9.) \quad \left(-\frac{3}{2}\right)\left(-\frac{5}{4}\right) = \frac{15}{8}$$

$$\begin{aligned} 10.) \quad \left(-4\frac{1}{3}\right)\left(1\frac{4}{5}\right) &= \left(-\frac{13}{3}\right)\left(\frac{9}{5}\right) \\ &= -\frac{39}{5} \end{aligned}$$

$$\begin{aligned} 12. \quad \left(-\frac{5}{2}\right) \div \left(\frac{2}{7}\right) &= -\frac{5}{2} \times \frac{7}{2} \\ &= -\frac{35}{4} \end{aligned}$$

$$\begin{aligned} 13. \quad 1\frac{1}{2} \div \left(-2\frac{3}{5}\right) &= \frac{3}{2} \times -\frac{5}{13} \\ &= -\frac{15}{26} \end{aligned}$$

$$\begin{aligned} 14. \quad \frac{5}{6} \div \left(\frac{4}{5} + \frac{1}{6}\right) &= \frac{5}{6} \div \left(\frac{8}{6} + \frac{1}{6}\right) \\ &= \frac{5}{6} \div \left(\frac{9}{6}\right) \\ &= \frac{5}{6} \times \frac{6}{9} \\ &= \frac{5}{9} \end{aligned}$$

Short Answer

$$\begin{aligned} 18. \quad \frac{6}{5} - \left(-\frac{7}{5}\right) &= \frac{6}{5} + \frac{7}{5} \\ &= \frac{13}{5} \end{aligned} \quad \begin{aligned} 19. \quad \frac{11}{2} - \left(-\frac{7}{3}\right) + \left(-\frac{13}{4}\right) &= \frac{11}{2} + \frac{7}{3} - \frac{13}{4} \\ &= \frac{40}{20} + \frac{28}{20} - \frac{65}{20} \\ &= \frac{3}{20} \end{aligned}$$

$$\begin{aligned} 20. \quad \left(3\frac{1}{2}\right) - \left(3\frac{5}{3}\right) &= \left(\frac{7}{2}\right) - \left(\frac{11}{3}\right) \\ &= -\frac{17}{6} \end{aligned}$$

$$\begin{aligned} 21. \quad \left(\frac{3}{2}\right) \times \left(\frac{3}{2}\right) \left(-\frac{5}{7}\right) &= \frac{45}{28} \quad 22. \quad \left(-\frac{4}{3}\right) \div \left(-\frac{5}{3}\right) = \frac{-4}{3} \times \frac{3}{-5} \\ &= \frac{12}{15} \\ &= \frac{4}{5} \end{aligned}$$

$$\begin{aligned}
 23. \quad -8\frac{2}{5} \div -1\frac{4}{5} &= \frac{-42}{5} \div \frac{-9}{5} \\
 &= \frac{-42}{5} \times \frac{5}{-9} \\
 &= \frac{42}{9} \\
 &= \frac{14}{3}
 \end{aligned}$$

$$\begin{aligned}
 24. \quad \frac{2}{3} - \left(-\frac{7}{12}\right) - \left(-\frac{4}{3}\right) &= \frac{2}{3} - \frac{1}{9} \\
 &= \frac{6}{9} - \frac{1}{9} \\
 &= \frac{5}{9}
 \end{aligned}$$

$$\begin{aligned}
 25. \quad 1\frac{1}{8} \times 2\frac{2}{5} - 1\frac{3}{4} &= \left(\frac{9}{8}\right) \left(\frac{12}{5}\right) - \frac{7}{4} \\
 &= \frac{9}{2} - \frac{7}{4} \\
 &= \frac{18}{4} - \frac{7}{4} \\
 &= \frac{11}{4}
 \end{aligned}$$

$$\begin{aligned}
 26. \quad \left(\frac{1}{3} + \frac{3}{5}\right) \div \left(-\frac{5}{9} \times \frac{4}{5}\right) &= \left(\frac{5}{15} + \frac{9}{15}\right) \div \frac{-4}{15} \\
 &= \frac{14}{15} \times \frac{15}{-4} \\
 &= \frac{-7}{2}
 \end{aligned}$$

$$\begin{aligned}
 27. \quad \frac{8}{9} \times \frac{-5}{12} \div -\frac{4}{9} &= \frac{-10}{27} \times \frac{-9}{4} \\
 &= \frac{5}{6}
 \end{aligned}$$

$$\begin{aligned}
 29. \quad -2\frac{3}{4} - (-4\frac{1}{3}) - 2\frac{5}{6} &= -\frac{11}{4} + \frac{13}{3} - \frac{17}{6} \\
 &= \frac{-33}{12} + \frac{52}{12} - \frac{34}{12} \\
 &= \frac{-15}{12} \\
 &= \frac{-5}{4}
 \end{aligned}$$

$$31. \left[ 1 \frac{5}{7} \times (-3 \frac{5}{6}) \right] \div \left[ (-2 \frac{1}{10}) \div 0 \frac{7}{8} \right]$$

$$\left[ \left( \frac{12}{7} \right) \left( -\frac{23}{6} \right) \right] \div \left[ -\frac{21}{5} \times \frac{4}{-1} \right]$$

$$= -\frac{46}{7} \div -\frac{12}{5}$$

$$= -\frac{46}{7} \times \frac{5}{-12}$$

$$= \frac{115}{42}$$