

## Ejercicios

$$4.8.1) \quad a) \quad 4 \frac{7}{8} - 1 \frac{3}{4} = 3 + \frac{7}{8} - \frac{6}{8} = 3 + \frac{1}{8} = \boxed{3 \frac{1}{8}}$$

$$\begin{aligned} (b) \quad 3 \frac{1}{3} - 7 \frac{2}{9} &= 3 + \frac{1}{3} - 7 - \frac{2}{9} \\ &= -4 + \frac{3}{9} - \frac{2}{9} = -4 + \frac{1}{9} \\ &= -3 - \frac{8}{9} = \boxed{-\left(3 \frac{8}{9}\right)} \end{aligned}$$

$$\begin{aligned} (c) \quad 19 \frac{3}{20} - 9 \frac{13}{15} &= 10 + \frac{9}{60} - \frac{52}{60} \\ &= 10 - \frac{43}{60} \\ &= 9 + \frac{17}{60} = \boxed{9 \frac{17}{60}} \end{aligned}$$

$$\begin{aligned} (d) \quad 18 - \left(6 \frac{1}{2} + 5 \frac{1}{3}\right) &= 18 - \left(11 + \frac{3}{6} + \frac{2}{6}\right) \\ &= 18 - \left(11 + \frac{5}{6}\right) \\ &= 7 - \frac{5}{6} \\ &= \boxed{6 \frac{1}{6}} \end{aligned}$$

$$(e) \quad 5 \frac{5}{12} \cdot 24 = \left(5 + \frac{5}{12}\right) \cdot 24 = 120 + 10 = \boxed{130}$$

$$\begin{aligned} (f) \quad 1 \frac{1}{2} \cdot \left(6 \frac{2}{3} - 4 \frac{4}{9}\right) &= \frac{3}{2} \cdot \left(2 + \frac{6}{9} - \frac{4}{9}\right) \\ &= \frac{3}{2} \left(2 + \frac{2}{9}\right) = 3 + \frac{1}{3} \\ &= \boxed{3 \frac{1}{3}} \end{aligned}$$

$$\begin{aligned}
 (g) \quad 5 \frac{1}{3} + 2 \frac{1}{3} \div 3 \frac{1}{2} &= 5 \frac{1}{3} + \left( 2 + \frac{1}{3} \right) \div \left( 7/2 \right) \\
 &= 5 \frac{1}{3} + \left( \frac{7}{3} \cdot \frac{2}{7} \right) \\
 &= 5 \frac{1}{3} + \frac{2}{3} = 5 + \frac{3}{3} = \boxed{6}
 \end{aligned}$$

$$\begin{aligned}
 (h) \quad 3 \frac{2}{3} \div \left( -6 \frac{7}{8} \right) \\
 \frac{11}{3} \div \left( -\frac{48}{8} - \frac{7}{8} \right) &= \frac{11}{3} \div \left( -\frac{55}{8} \right) \\
 &= \frac{11}{3} \cdot -\left( \frac{8}{55} \right) = \boxed{-\frac{8}{15}}
 \end{aligned}$$

$$\begin{aligned}
 4.8.2) \quad 2 \frac{1}{2} + 3 \frac{1}{3} + 4 \frac{1}{4} + 5 \frac{1}{5} + 6 \frac{1}{6} \\
 &= 20 + \left( \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \frac{1}{6} \right) \\
 &= 20 + \left( \frac{3}{6} + \frac{2}{6} + \frac{1}{4} + \frac{1}{5} + \frac{1}{6} \right) \\
 &= 20 + \left( 1 + \frac{1}{4} + \frac{1}{5} \right) \\
 &= 21 + \frac{1}{4} + \frac{1}{5} = \boxed{21}
 \end{aligned}$$

$$\begin{aligned}
 4.8.3) \quad (7a^2 - 11a + 3)(3a - 4) \quad a = 1 \frac{1}{3} = \frac{4}{3} \\
 \left( 7 \left( \frac{16}{9} \right) - 11 \left( \frac{4}{3} \right) + 3 \right) (4 - 4) = (\dots)(0) = \boxed{0}
 \end{aligned}$$

$$\begin{aligned}
 4.8.4) \quad 136 \frac{3}{4} - 131 \frac{7}{8} &= 5 + \frac{3}{4} - \frac{7}{8} \\
 &= 5 + \frac{6}{8} - \frac{7}{8} = 5 - \frac{1}{8} = \boxed{4 \frac{7}{8}}
 \end{aligned}$$

4.8.5)

$$3\left(2\frac{1}{2}\right) + 3\left(3\frac{1}{3}\right) = 6 + \frac{3}{2} + 9 + 1$$
$$= 16 + \frac{3}{2} = \boxed{17\frac{1}{2}}$$

4.8.6)

$$60 - 6\frac{1}{2} = 54 - \frac{1}{2} = \left(53 + \frac{1}{2}\right) \cdot \frac{1}{60}$$
$$= \frac{53}{60} + \frac{1}{120} = \frac{106}{120} + \frac{1}{120}$$
$$= \boxed{\frac{107}{120}}$$