

p 88

$$\underline{2d} \quad (30p - 18q + 6r) \div 6$$

$$= \frac{30p}{6} - \frac{18q}{6} + \frac{6r}{6}$$

$$= 5p - 3q + r$$

3a

$$2(2a + 5) + 4(3a - 1)$$

$$= (2)(2a) + (2)(5) + (4)(3a) - (4)(1)$$

$$= \underline{4a} + 10 + \underline{12a} - 4$$

$$= 16a - 6$$

b

$$-3(2x + 7) + 8(2x - 1)$$

$$= (-3)(2x) + (-3)(7) + (8)(2x) - (8)(1)$$

$$= \cancel{-6x} + -21 + \cancel{16x} - 8$$

$$= 10x - 29$$

$$\begin{aligned}
 & \frac{4a}{-8(4a-5) - 2(3a+2) + 7(9a-2)} \\
 & = (-8)(4a) - (-8)(5) - (2)(3a) - (2)(2) \\
 & \quad + (7)(9a) + (7)(-2) \\
 & = -32a - 40 - 6a + 4 + 63a - 14 \\
 & \quad + \\
 & \begin{array}{r} -38 \\ + 63 \\ \hline \end{array} \quad \begin{array}{r} 36 \\ - 38 \\ \hline 25 \end{array} \\
 & = 25a + 22
 \end{aligned}$$

3e

$$\begin{aligned}
 & 5(2a-3) - 6(2a-4) + 4(-2a+7) \\
 = & (5)(2a) - (5)(3) - (6)(2a) - -(6)(4) \\
 & + (4)(-2a) + (4)(7) \\
 \approx & \underline{10a} - \underline{15} - \underline{12a} + \underline{24} + \underline{-8a} + \underline{28} \\
 = & -10a + 37
 \end{aligned}$$

$$\begin{array}{r}
 -15 + 24 \\
 = 24 - 15 = 9 \\
 + 28 \\
 \hline
 37
 \end{array}$$

p 89

q_a

$$3x(x + 5)$$

$$= (3x^1)(x^1) + (3x)(5)$$

$$= 3x^2 + 15x$$

q_e

$$8c(-2c + 8d)$$

$$= (8c^1)(-2c^1) + (8c)(8d)$$

$$= -16c^2 + 64cd$$

H/w

p 88 #4, 5

p 89 #9, 10