

6.1 p 347 even

- ② $5x - 2$ Binomial of Degree 1
- ④ $x^5 - 7x$ Binomial of Degree 5
- ⑥ $10x^2$ Monomial of Degree 2.
- ⑧ $9 = 9x^0$ Monomial of Degree 0
- ⑩ $x^2 - 9x + 2$ Trinomial of Degree 2
- ⑫ $3y^2 - 14y^5 + 6 = -14y^5 + 3y^2 + 6$ Trinomial of Degree 5.
- ⑭ $9x - 5x^3 = -5x^3 + 9x$ Binomial of Degree 3.
- ⑯ $-11y^{26}$ Monomial of Degree 26.
- ⑱ $(8x - 5) + (-13x + 9) = 8x - 13x - 5 + 9$
 $= -5x + 4$
- ⑳ $(11x^2 + 7x - 4) + (27x^2 + 10x - 20) = 11x^2 + 27x^2 + 7x + 10x - 4 - 20$
 $= 38x^2 + 17x - 24$
- ㉑ $(-3x^2 + x) + (4x^2 + 8x) = -3x^2 + 4x^2 + x + 8x$
 $= x^2 + 9x$
- ㉒ $(-7x^2 + 8x + 3) + (2x^2 + x + 8) = -7x^2 + 2x^2 + 8x + x + 11$
 $= -5x^2 + 9x + 11$

6.1 p347

$$\begin{aligned} \textcircled{26} (2y^3 + 3y + 10) + (3y^2 + 5y - 22) &= 2y^3 + 3y^2 + 3y + 5y + 10 - 22 \\ &= 2y^3 + 3y^2 + 8y - 12 \end{aligned}$$

$$\begin{aligned} \textcircled{28} (4x^3 + 5x + 13) + (-4x^2 + 22) &= 4x^3 - 4x^2 + 5x + 13 + 22 \\ &= 4x^3 - 4x^2 + 5x + 35 \end{aligned}$$

$$\begin{aligned} \textcircled{30} (7y^3 + 5y - 1) + (2y^2 - 6y + 3) &= 7y^3 + 2y^2 + 5y - 6y - 1 + 3 \\ &= 7y^3 + 2y^2 - y + 2 \end{aligned}$$

$$\begin{aligned} \textcircled{32} (7r^4 + 5r^2 + 2r) + (-18r^4 - 5r^2 - r) &= 7r^4 - 18r^4 + 5r^2 - 5r^2 + 2r - r \\ &= -11r^4 + r \end{aligned}$$

$$\begin{aligned} \textcircled{34} \left(12x^3 - x^2 - x + \frac{4}{3}\right) + \left(x^3 + x^2 + x - \frac{1}{3}\right) &= 12x^3 + x^3 - x^2 + x^2 - x + x + \frac{4}{3} - \frac{1}{3} \\ &= 13x^3 + \frac{1}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{36} \left(\frac{2}{5}x^4 + \frac{2}{3}x^3 + \frac{5}{8}x^2 + 7\right) + \left(\frac{-4}{5}x^4 + \frac{1}{3}x^3 - \frac{1}{4}x^2 - 7\right) &= -\frac{2}{5}x^4 + \frac{3}{3}x^3 + \frac{3}{8}x^2 \\ &= -\frac{2}{5}x^4 + x^3 + \frac{3}{8}x^2 \end{aligned}$$

$\frac{1}{4}\left(\frac{2}{2}\right) = \frac{2}{8}$

(p2)

6.1 p347 even

$$\begin{array}{r} \textcircled{38} \quad (0.06x^5 - 0.2x^3 + x + 0.05) \\ + \quad (-0.04x^5 + 2x^4 - 0.18x + 0.5) \\ \hline \end{array}$$

$$0.02x^5 + 2x^4 - 0.2x^3 - 0.2x + 0.55$$

$$\begin{array}{r} \textcircled{40} \quad 13x^4 - x^2 \\ 7x^4 + 2x^2 \\ \hline \end{array}$$

$$20x^4 + x^2$$

$$\begin{array}{r} \textcircled{42} \quad 7x^2 - 5x - 6 \\ -9x^2 + 4x + 6 \\ \hline -2x^2 - x \end{array}$$

$$\begin{array}{r} \textcircled{44} \quad \frac{1}{4}x^4 - \frac{2}{3}x^3 - 5 \\ -\frac{1}{2}x^4 + \frac{1}{5}x^3 + 4.7 \\ \hline \end{array}$$

$$= \frac{1}{4} - \frac{1}{2} \left(\frac{2}{3} \right)$$

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

$$-\frac{1}{4}x^4 = \frac{7}{15}x^3 - 0.3$$

$$= \frac{1}{3} - \frac{2}{3} + \frac{1}{5} \left(\frac{3}{3} \right)$$

$$\begin{array}{r} \textcircled{44} \quad \frac{1}{3}x^9 - \frac{1}{5}x^5 - 2.7 \\ -\frac{3}{4}x^9 + \frac{2}{3}x^5 + 1 \\ \hline \end{array}$$

$$= -\frac{10}{15} + \frac{3}{15}$$

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

$$-\frac{5}{12}x^9 + \frac{7}{15}x^5 - 1.7$$

$$= -\frac{1}{5} \left(\frac{3}{3} \right) + \frac{2}{3} \left(\frac{5}{5} \right)$$

$$= \frac{1}{3} - \frac{1}{4}$$

$$= -\frac{3}{15} + \frac{10}{15}$$

$$= \frac{1}{3} \left(\frac{4}{4} \right) - \frac{3}{4} \left(\frac{3}{3} \right)$$

$$= \frac{7}{15}$$

$$= \frac{4}{12} - \frac{9}{12}$$

(P3)

6d p54/even

$$\begin{array}{r} (46) \quad y^3 + y^2 - 7y + 9 \\ -y^3 - 6y^2 - 8y + 11 \\ \hline -5y^2 - 15y + 20 \end{array}$$

$$\begin{array}{r} (48) \quad -4y^3 + 6y^2 - 8y + 11 \\ 2y^3 + 0y^2 + 9y - 3 \\ \hline -2y^3 + 6y^2 + y + 8 \end{array}$$

$$\begin{array}{r} (50) \quad 7y^5 - 3y^3 + y^2 \\ 0y^5 + 2y^3 - y^2 - 4y - 3 \\ \hline 7y^5 - y^3 - 4y - 3 \end{array}$$

$$\begin{array}{r} (52) \quad 7y^2 - 11y - 6 \\ 8y^2 + 3y + 4 \\ -9y^2 - 5y + 2 \\ \hline 6y^2 - 13y \end{array}$$

$$\begin{array}{r} (54) \quad 7.9x^3 - 6.8x^2 + 3.3 \\ 6.1x^3 - 2.2x^2 + 7 \\ 0x^3 + 4.3x^2 - 5 \\ \hline 14x^3 - 4.7x^2 + 5.3 \end{array}$$

6.1 p³⁴⁷ even

$$\textcircled{56} (x-2) - (-7x+9)$$

$$= x - 2 - 7x + 9$$

$$= x - 7x - 2 + 9$$

$$= \boxed{-6x + 7}$$

$$\textcircled{58} (3x^2 - 8x - 2) - (11x^2 + 5x + 4)$$

$$= 3x^2 - 11x^2 - 8x - 5x - 2 - 4$$

$$= \boxed{-8x^2 - 13x - 6}$$

$$\textcircled{60} (3x^2 - 2x) - (5x^2 - 6x)$$

$$= 3x^2 - 5x^2 - 2x + 6x$$

$$= \boxed{-2x^2 + 4x}$$

$$\textcircled{62} (x^2 - 5x + 3) - (x^2 - 6x - 8)$$

$$= x^2 - x^2 - 5x + 6x + 3 + 8$$

$$= \boxed{x + 11}$$

$$\textcircled{64} (y-2) - (-7y-9)$$

$$= y - 2 + 7y + 9$$

$$= \boxed{-6y + 7}$$

$$\textcircled{66} (5y^3 + y^2 - 3y - 8) - (y^2 - 8y + 11)$$

$$= 5y^3 + y^2 - y^2 - 3y + 8y - 8 - 11$$

$$= \boxed{5y^3 + 5y - 19}$$

$$\textcircled{68} (2n^2 - n^7 - 6) - (2n^3 - n^7 - 8)$$

$$= 2n^2 - 2n^3 - n^7 + n^7 - 6 + 8$$

$$= 2n^2 - 2n^3 + 2$$

$$= \boxed{-2n^3 + 2n^2 + 2}$$

$$\textcircled{70} (y^5 - y^3) - (y^4 - y^2)$$

$$= y^5 - y^3 - y^4 + y^2$$

$$= \boxed{y^5 - y^4 - y^3 + y^2}$$

$$\textcircled{72} (-3x^6 + 3x^4 - x^2) - (-x^6 + 2x^4 + 2x^2)$$

$$= -3x^6 + x^6 + 3x^4 - 2x^4 - x^2 - 2x^2$$

$$= \boxed{-2x^6 - x^4 - 3x^2}$$

6d p348 even

$$\frac{\frac{1}{3}\left(\frac{2}{3}\right)}{-\frac{2}{6}} = \frac{\frac{1}{2}\left(\frac{2}{3}\right)}{\frac{3}{6}}$$

74) $\left(\frac{3}{8}x^2 - \frac{1}{3}x - \frac{1}{4}\right) - \left(-\frac{1}{8}x^2 + \frac{1}{2}x - \frac{1}{4}\right)$

$$= \frac{3}{8}x^2 + \frac{1}{8}x^2 - \frac{2}{6}x - \frac{3}{6}x - \frac{1}{4} + \frac{1}{4}$$

$$= \frac{4}{8}x^2 - \frac{5}{6}x$$

$$= \boxed{\frac{1}{2}x^2 - \frac{5}{6}x}$$

76) $\frac{4x+2}{-(3x-5)}$
 $\boxed{x+7}$

78) $\frac{ay^2 - 6}{-(-5y^2 + 2)}$

$$\boxed{14y^2 - 8}$$

80) $\frac{3x^5 - 5x^3 + 6}{-(7x^5 + 4x^3 - 2)}$

$$\boxed{-4x^5 - 9x^3 + 8}$$

82) $\frac{3y^4 - 4y^2 + 7}{-(-5y^4 - 6y^2 - 13)}$

$$\boxed{8y^4 + 2y^2 + 20}$$

84) $\frac{4y^3 + 5y^2 + 7y + 11}{-(-5y^3 + 6y^2 - 9y - 3)}$

$$\boxed{9y^3 - y^2 + 16y + 14}$$

86) $\frac{5y^6 - 3y^3 + 2y^2}{-(-y^3 - y^2 - y - 1)}$

$$\boxed{5y^6 - 2y^3 + 3y^2 + y + 1}$$

88) $\frac{0.04x^3 - 0.03x^2 + 0.05x}{-(0.02x^3 - 0.06x^2 - x)}$

$$\boxed{0.06x^3 + 0.03x^2 + 1.05x}$$

90)

| | |
|----|----|
| x | 4 |
| -3 | 7 |
| -2 | 2 |
| -1 | -1 |
| 0 | -2 |
| 1 | -1 |
| 2 | 2 |

$y = x^2 - 2$

