

$$30 \quad A = \frac{x^2}{49} - 2x + 49; \quad D = \frac{4}{9}x^2 + 2x + \frac{9}{4};$$

$$B = \frac{49}{25} - \frac{81}{64}x^2; \quad E = 4x^3 + x + \frac{1}{16};$$

$$C = \frac{3}{5}x + \frac{1}{4} + \frac{9}{25}x^2;$$

$$31 \quad A = (x^2 - 2x + 1) + (x - 1)(x - 2);$$

$$B = (1 - x)(7x + 6) - (4 - 4x)(x + 1)$$

$$- 1 + 2x - x^2;$$

$$C = -2(x - 3)^2 + (x - 3)(4x - 3) + (x^2 - 9);$$

$$D = 4x^2 + 9 - 12x + 3(2x - 3)(2 - x)$$

$$- 2(2x - 3);$$

$$32 \quad A = (x^2 - 6x + 9) + (3x - 2)(x - 3)$$

$$+ (x^2 - 9);$$

$$B = (3 - 2x)(4 - x) - 3(6 - 4x)(7 - x)$$

$$- 9x + 6x^2;$$

$$C = 2(3x - 5)(7 - 2x) + (9x^2 + 25 - 30x)$$

$$- 3(6x - 10);$$

$$D = 3(17 - 12x)(3 - x)$$

$$- 3(9 + x^2 - 6x) - 3 + x.$$

$$33 \quad A = 2(2x - 5)(5 - x) - 8x^2 - 50 + 40x;$$

$$B = (2x - 8)(3x + 2) + 3x^2 - 48;$$

$$C = 2(x - 2)(x - 3) - (x - 5)(6 - 3x) - x^2 + 4;$$

$$D = (5x - 1)(8x - 12) + 9 - 4x^2 - (4x - 6)^2.$$

$$34 \quad A = 6(13 - 4x)(5x - 4) - 3(26x - 8x^2)$$

$$- 3(169 + 16x^2 - 104x);$$

$$B = 2(6x + 7)(2x - 3) - (36x^2 + 49 + 84x)$$

$$- 3(x + 5)(6x + 7);$$

$$C = (7 + 2x)(4 - x) - 3(5 + x)(4 - x)$$

$$- 6(16 - 8x + x^2);$$

$$D = (49 - 9x^2) + 3(2 + x)(7 + 3x)$$

$$- 4(49 + 9x^2 + 42x).$$

$$35 \quad A = (4 - 3x)(2 - x) - 2(12 - 9x)(5 - 2x)$$

$$- 8x + 6x^2;$$

$$B = (x + 3)(4x - 10) - 4x^2 + 20x - 25$$

$$+ 2(4x^2 - 25);$$

$$C = (x - 3)(7 - 2x) - (4x^2 + 36 - 24x)$$

$$- x + 3;$$

$$D = (1 - 3x)(7x + 4) - (9x - 3)^2$$

$$+ 2(9x^2 - 1).$$

$$36 \quad A = \frac{4}{9}x^2 - 1; \quad B = \frac{18}{8} - 6x + 4x^2;$$

$$C = \frac{27}{75} - x^2; \quad D = \frac{12}{147}x^2 + \frac{125}{20} + \frac{20}{14}x.$$

$$37 \quad A = (3x + 1)^2 - (5x + 1)^2; \quad A^2 - B^2$$

$$B = (5x + 3)^2 - (2x - 5)^2;$$

$$C = (5x - 1)^2 - (3x + 2)^2;$$

$$D = (2x - 1)^2 - (5 + x)^2.$$

$$38 \quad A = (3x - 5)^2 - (7 - 2x)^2;$$

$$B = (7x - 2)^2 - (4 - 5x)^2;$$

$$C = (a + b - c)^2 - (a - b + c)^2;$$

$$D = (x - y + 4)^2 - (2x + 3y - 1)^2.$$

$$39 \quad A = (4x + 5)^2 - 9(x + 1)^2;$$

$$B = (2x - 1)^2 - 4(2 - 3x)^2;$$

$$C = 16(x + 1)^2 - 25(2 - x)^2;$$

$$D = 4(3x - 2)^2 - 9(x + 3)^2.$$

$$40 \quad A = (4x^2 + 1)^2 - 16x^2; \quad A^2 - B^2$$

$$B = (9x^2 + 4)^2 - 144x^2;$$

$$C = (x^2 + 9)^2 - 36x^2;$$

$$D = (x^2 + 1)^2 - 4x^2.$$

$$41 \quad A = (x^2 - 16)^2 - (x + 4)^2;$$

$$B = (x^2 - 4)^2 - (x - 2)^2;$$

$$C = (4x^2 - 25)^2 - (2x + 5)^2;$$

$$D = (9x^2 - 4)^2 - (3x + 2)^2.$$

$$42 \quad A = (x - 4)^3 - (x - 4);$$

$$B = (x - 7)^3 - (x - 7)^2;$$

$$C = (3x + 4)^3 - 4(3x + 4);$$

$$D = 25(2x + 1)^3 - 9(2x + 1)^2.$$

$$43 \quad A = (x^2 - 1)^2 - 3x^2 + 3;$$

$$B = (x^2 - 36)^2 + 11(x^2 - 36);$$

$$C = (4x^2 - 1)(5x + 3)^2 - 4(4x^2 - 1)$$

$$D = (1 - x^2)(1 + x)^2 - 9(1 - x^2).$$

$$44 \quad A = x^3 + 3x^2 - 4x - 12;$$

$$B = x^3 - 5x^2 - x + 5;$$

$$C = 4x^3 - 28x^2 - 9x + 63;$$

$$D = 24x^3 + 8x^2 - 6x - 2.$$

$$45 \quad A = \left(\frac{5}{2}x^2 - x + 5\right)^2 - \left(\frac{3}{2}x^2 + 5x - 4\right)^2;$$

$$B = (x^2 - 3x - 13)^2 - (x^2 + 3x - 5)^2;$$

$$C = (2x^2 - 3x + 2)^2 - (2x^2 + 3x - 6)^2;$$

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

$$46 \quad A = (x^2 - 6x + 9) - 1;$$

$$B = (x^2 - 2x + 1) - 9;$$

$$C = (4x^2 + 12x + 9) - 49x^2;$$

$$D = (36x^2 - 60x + 25) - 81.$$

$$47 \quad A = x^2 - 6x + 8; \quad C = 25x^2 + 30x - 7;$$

$$B = 4x^2 + 28x + 45; \quad D = x^2 - 16x + 55.$$