

1) $2x(x + 5 + 7x^2) = \mathbf{2x^2 + 10x + 14x^3} = \mathbf{14x^3 + 2x^2 + 10x}$

2) $-5(2a + 3 - x) = -10a - 15 + 5x = -10a + 5x - 15$

3) $-5(-x - 2a - 3) = 5x + 10a + 15 = 10a + 5x + 15$

4) $-5x(2a + 3x - 7) = -10ax - 15x^2 + 35x$

5) $-5p(-p - q + 3) = 5p^2 + 5pq - 15p = 5p^2 - 15p + 5pq$

6) $3(x - 6) + 2(x - 3) = \mathbf{3x - 18 + 2x - 6} = \mathbf{5x - 24}$

7) $3x(x - 6) + 2(x - 3) = 3x^2 - 18x + 2x - 6 = 3x^2 - 16x - 6$

8) $2(-2x + 7) + 2x(-x - 3) = -4x + 14 - 2x^2 - 6x = -2x^2 - 10x + 14$

9) $3a(-x - 6a) - 2x(-a - 3) = -3ax - 18a^2 + 2ax + 6x = -18a^2 - ax + 6x$

10) $10(x^2 + 9) - 2x(x - 3) = 10x^2 + 90 - 2x^2 + 6x = 8x^2 + 6x + 90$

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

12) $\frac{1}{7}x(14x - 35) = 2x^2 - 5x$

13) $-\frac{5}{12}(-\frac{1}{3}x - 8) = \frac{5}{12} \times \frac{1}{3}x + \cancel{\frac{5}{12} \times 8} = \frac{5}{36}x + \frac{10}{3} = \frac{5}{36}x + 3\frac{1}{3}$

14) $10(3x^2 - 9) - 5(10x - 3) = 30x^2 - 90 - 50x + 15 = 30x^2 - 50x - 75$

15) $-12x^3(\frac{1}{3}x - 5x^2) + 4x^4 = -\frac{12}{3}x^4 + 60x^5 + 4x^4 = \cancel{-4x^4} + 60x^5 + \cancel{4x^4} = 60x^5$