

1. $3x(2x + 5) = ?$

Distribute

Answer: $6x^2 + 15x$

2. $(x + 2)(x + 3) = ?$

$x^2 + 3x + 2x + 6$

Answer: $x^2 + 5x + 6$

3. $(x + 4)(x - 2) = ?$

$x^2 - 2x + 4x - 8$

Answer: $x^2 + 2x - 8$

4. $(x - 5)(x - 3) = ?$

$x^2 - 3x - 5x + 15$

Answer: $x^2 - 8x + 15$

5. $(2x + 1)(x + 4) = ?$

$2x^2 + 8x + x + 4$

Answer: $2x^2 + 9x + 4$

6. $(3x - 2)(2x + 5) = ?$

$6x^2 + 15x - 4x - 10$

Answer: $6x^2 + 11x - 10$

7. $(x + 3)^2 = ?$

$(x+3)(x+3)$

Answer: $x^2 + 6x + 9$

8. $(5x - 3)(-2x + 7) = ?$ (Trainer echo - June 2025 Q27!)

$-10x^2 + 35x + 6x - 21$

Answer: $-10x^2 + 41x - 21$

9. $(2x + 3)(-6x^2 + 5x - 1) = ?$ (Trainer echo - Jan 2026 Q27!) ★ challenge

2x times all three; 3 times all three

$-12x^3 + 10x^2 - 2x - 18x^2 + 15x - 3$

Answer: $-12x^3 - 8x^2 + 13x - 3$

10. $(x + 7)^2 + (x - 3)^2 = ?$ (Trainer echo - Aug 2025 Q19!) ★ challenge

$x^2 + 14x + 49$ and $x^2 - 6x + 9$

x-terms partly cancel

Answer: $2x^2 + 8x + 58$