

6, 8, 10, 12, 4

$$4. (r-4)(3r-2)$$

$$3r^2 - 2r - 12r + 8$$

$$3r^2 - 14r + 8$$

$$6. (4k-5)^2 \quad \underline{\text{FOIL}}$$

$$(4k-5)(4k-5)$$

$$16k^2 - 20k - 20k + 25$$

$$16k^2 - 40k + 25$$

$$8. (2s+7)(2s-7)$$

$$4s^2 - \cancel{14s} + \cancel{14s} - 49$$

$$4s^2 - 49$$

$$10. (5z+6)(6z-5)$$

$$30z^2 - 25z + 36z - 30$$

$$30z^2 + 11z - 30$$

$$12. (a-5t)(5t-9)$$

$$45t - 81 - 25t^2 + 45t$$

$$-25t^2 + 90t - 81$$

12/9

9. $(7t + 2)(2t - 1)$

$$\begin{array}{l}
 A \cdot B \cdot C \\
 x^3(3x-2)(x+5) \\
 (3x^4-2x^3)(x+5) \quad A \cdot B \cdot C \neq A \cdot B \cdot AC \\
 3x^5 + \underline{15x^4 - 2x^4} - 10x^3 \\
 3x^5 + 13x^4 - 10x^3
 \end{array}$$

$$\begin{array}{l}
 mn(2n-3m)(4m+6n) \\
 mn(\underline{8mn} + 12n^2 - 12m^2 - \underline{18mn}) \\
 mn(12n^2 - 10mn - 12m^2) \\
 12mn^3 - 10m^2n^2 - 12m^3n
 \end{array}$$

$$(2t - 3)(t^2 + 5t - 1)$$

$$2t^3 + 10t^2 - 2t - 3t^2 - 15t + 3$$

$$2t^3 + 7t^2 - 17t + 3$$

$$(x^3 + 2x^2 - x)(x + 3)$$

	x	3
x ³	x ⁴	3x ³
2x ²	2x ³	6x ²
-x	-x ²	-3x

$$x^4 + 5x^3 + 5x^2 - 3x$$

$$(\underline{t} - 3)(t^2 + 4t - 5)$$

$$t^3 + \underline{4t^2} - \underline{5t} - \underline{3t^2} - \underline{12t} + 15$$

$$t^3 + t^2 - 17t + 15$$

$$(\cancel{x^2 + 3x - 1})(\cancel{x^2 + x + 2})$$