

12, 14, 16, 18, 20

$$12. \quad t^2 + 2t - 15$$

$$(t - 3)(t + 5)$$

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

$$t^2 + 2t - 15 \checkmark$$

$$14. \quad s^2 - 6s - 27 \quad \begin{matrix} 1, 27 \\ 3, 9 \end{matrix}$$

$$(s + 3)(s - 9)$$

$$s^2 - 9s + 3s - 27$$

$$s^2 - 6s - 27 \checkmark$$

$$16. \quad 5v^2 + 4v - 1$$

$$(5v - 1)(v + 1)$$

$$5v^2 - 5v + v - 1 \quad 5v^2 + 5v - v - 1$$

$$5v^2 - 4v - 1 \quad 5v^2 + 4v - 1 \checkmark$$

$$18. \quad 21 - 4x - x^2$$

$$(7 + x)(3 - x)$$

$$21 - 7x + 3x - x^2$$

$$21 - 4x - x^2 \checkmark$$

$$20. \quad p^2 + 2pq - 24q^2 \quad \begin{matrix} 1, 24 \\ 2, 12 \\ 3, 8 \\ 4, 6 \end{matrix}$$

$$(p - 4q)(p + 6q)$$

$$p^2 + 6pq - 4pq - 24q^2$$

$$p^2 + 2pq - 24q^2$$

$$1/25$$

$$17. 8 + 2s - s^2$$

4

$$15t^2 - 16t + 4$$

~~$\frac{1}{15}$~~
 $\frac{3}{5}$

$$(3t - 2)(5t - 2)$$

$\begin{matrix} 1 & 4 \\ 2 & 2 \end{matrix}$

$$-6t - 10t = -16t \checkmark$$

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

$$15t^2 - 16t + 4 \checkmark$$

$$\underline{2x^2} + 9x - \underline{18}$$

$$\begin{array}{r} \cancel{9 \cdot 2} \\ \cancel{18 \cdot 1} \\ 3 \cdot 6 \\ 12 - 3 = 9 \end{array}$$

$$\left(\underline{2x - 3} \right) \left(\underline{x + 6} \right)$$

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

$$2x^2 + 9x - 18 \checkmark$$

$$5r^2 - 10r + 7 \quad \neq$$

$$\left(\cancel{5r - 7} \right) \left(\cancel{r - 1} \right)$$

$$-35r - r \neq -10r$$

$$-5r - 7r \neq -10r$$

prime