

$$p.175 \#10-20$$

$$12, 14, 17, 16, 20$$

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

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

$$\boxed{-25t^2 + 90t - 81}$$

$$14. (5h-3k)(h-2k)$$

$$5h^2 - 10hk - 3hk + 6k^2$$

$$5h^2 - 13hk + 6k^2$$

$$16. (10r-3s)(r+2s)$$

$$10r^2 + 20rs - 3rs - 6s^2$$

$$10r^2 + 17rs - 6s^2$$

$$17. (x^2-3)(x^2+3)$$

$$x^4 + \cancel{3x^2} - \cancel{3x^2} - 9$$

$$\boxed{x^4 - 9}$$

$$20. (2z^2-5)^2$$

$$(2z^2-5)(2z^2-5)$$

$$4z^4 - 10z^2 - 10z^2 + 25$$

$$\boxed{4z^4 - 20z^2 + 25}$$

HW Assessment

12/9

$$18. (p^2 - 2q^2)(p^2 + 2q^2)$$

$$20. (2z^2 - 5)^2$$

Multiplying three things together

$\begin{array}{l} \underline{2 \cdot 3 \cdot 4} \\ 6 \cdot 4 \\ 24 \checkmark \end{array}$	$\begin{array}{l} \underline{2 \cdot 3 \cdot 4} \\ 2 \cdot 12 \\ 24 \checkmark \end{array}$	$\begin{array}{l} 2 \cdot 3 \cdot 4 \\ 6 \cdot 8 \times \end{array}$
--	---	--

$$x^2(x+4)(x-3)$$

FOLling first

$$x^2(x^2 - 3x + 4x - 12)$$

$$x^2(x^2 + x - 12)$$

$$\boxed{x^4 + x^3 - 12x^2}$$

$$x^2(x+4)(x-3)$$

Distributing first

$$(x^3 + 4x^2)(x-3)$$

$$x^4 - 3x^3 + 4x^3 - 12x^2$$

$$\boxed{x^4 + x^3 - 12x^2}$$

$$mn(m-4n)^2$$

$$mn(m-4n)(m-4n)$$

$$mn(m^2 - 4mn - 4mn + 16n^2)$$

$$mn(m^2 - 8mn + 16n^2)$$

$$m^3n - 8m^2n^2 + 16mn^3$$

multiplying trinomials

$$(x-4)(x^2-3x+2)$$

$$x^3 - 3x^2 + 2x - 4x^2 + 12x - 8$$

$$\boxed{x^3 - 7x^2 + 14x - 8}$$

$$(x^2 - 3xy + 4y)(x - 3y)$$

$$(t^2 - 4t + 5)(t^2 + 8t - 1)$$

$$t^4 + 8t^3 - t^2 - 4t^3 - 32t^2 + 4t + 5t^2 + 40t - 5$$

$$\boxed{t^4 + 4t^3 - 28t^2 + 44t - 5}$$

your turn

$$x^2y(x-4y)^2$$

$$(x^2-4x+1)(x^2-3x-2)$$