

Starter

Solve.

$$1) \underline{(x-3)(2x-5)(x+4)} = 0$$

$$x-3=0$$

$$\underline{+3} \quad \underline{+3}$$

$$x=3$$

$$2x-5=0$$

$$\underline{+5} \quad \underline{+5}$$

$$\underline{2x} = \underline{5}$$

$$\underline{2} \quad \underline{2}$$

$$x = \frac{5}{2}$$

$$x+4=0$$

$$\underline{-4} \quad \underline{-4}$$

$$x = -4$$

$$1. (x-2)(x-3)=0$$

$$\underline{x=2, x=3}$$

$$2. (x+5)(x+3)=0$$

$$\underline{x=-5, x=-3}$$

$$3. (x)(x-1)=0$$

$$\underline{x=0, x=1}$$

$$4. (2x-2)(3x+3)=0$$

$$\underline{x=1, x=-1}$$

$$5. (2x)(3x-6)=0$$

$$\underline{x=0, x=2}$$

$$2x=0$$

6. $(-x+5)(x-5)=0$

$x = 5$

7. $x(x+8)=0$

$x = 0, x = -8$

8. $x(2x-1)(3x+9)=0$

$x = 0, x = 1/2, x = -3$

9. $(2x-1)(3x+1)(x+2)=0$

$x = 1/2, x = -1/3,$
 $x = -2$

10. $(1/2 x+4)(1/3 x-3)x=0$

$x = -8, x = 9,$
 $x = 0$

$\frac{1}{2}x + 4 = 0$

$\frac{2}{2} \cdot \frac{1}{2}x = -4 \cdot \frac{2}{2} \quad x = -8$

3)

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

$(-2p)(-t)$

	p^2	$3p$	-1
4	$4p^2$	$12p$	-4
$-2p$	$-2p^3$	$-6p^2$	$2p$

$$-2p^3 - 2p^2 + 14p - 4$$

6) $54xy^3$, $27x^2y^2$ $27xy^2$

$\frac{54}{1, 2, 3, 9, 18, 27, 54}$

$\frac{27}{1, 3, 9, 27}$

10) $18m^4n^3 - 27m^2n^2 - 45m^2n$

$9m^2n(2m^2n^2 - 3n - 5)$

$9m^2n \cdot 2m^2n^2 = 18m^4n^3$

$9m^2n \cdot 3n = 27m^2n^2$

$9m^2n \cdot 5 = 45m^2n$

$\frac{18}{1, 2, 3, 6, 9, 18}$

$\frac{27}{1, 3, 9, 27}$

$\frac{45}{1, 3, 5, 9, 15, 45}$

Find the **area** of a rectangle that has a length of $(x + 3)$ feet and a width of $(2x - 4)$ feet.

