

WB 9.2 #17

$$(x+2)(x+5) - x(4x-1)$$

$$x^2 + 7x + 10 - 4x^2 - x$$

$$\underline{x^2} + \underline{7x} + 10 + \underline{-4x^2} + \underline{-x}$$

$$\underline{-3x^2 + 8x + 10}$$

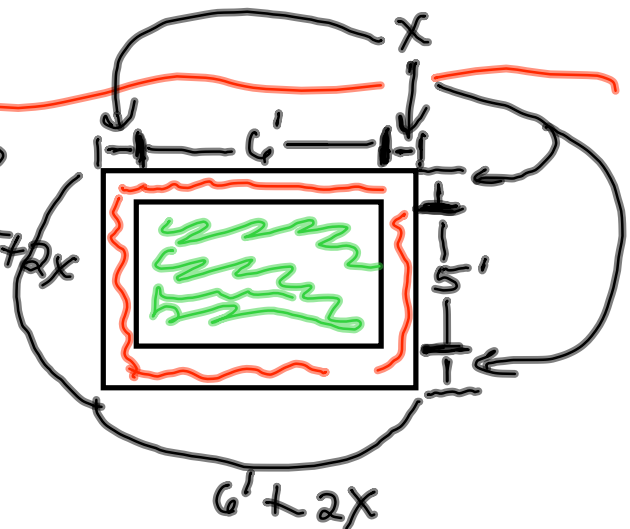
Length of garden + border

is $6 + 2x$

width of garden + border

is $5 + 2x$

$$A = (6 + 2x)(5 + 2x) =$$



$$\text{Area} = \underbrace{(6 + 2x)(5 + 2x)}_{\substack{+10x \\ 12x}} = 30 + 22x + 4x^2$$

$$\begin{array}{r} -42z^2 = 14z \\ +42z^2 \quad +42z^2 \end{array} \quad \begin{array}{r} 14 \\ \underline{3} \\ 42 \end{array}$$

$$0 = 14z + 42z^2$$

$$42z^2 + 14z = 0$$

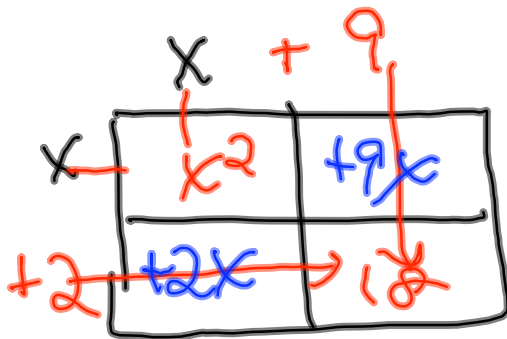
$$14z(3z + 1) = 0$$

$$14z = 0 \quad 3z + 1 = 0$$

$$z = 0 \quad 3z = -1$$

$$z = -\frac{1}{3}$$

$$x^2 + 11x + 18 = (x + 2)(x + 9)$$

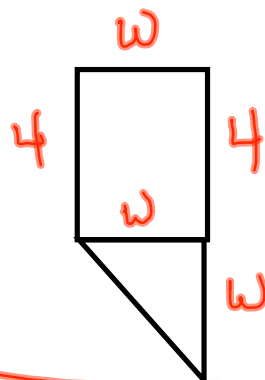


$$\begin{array}{r} +2x \\ +9x \\ \hline +11x \end{array}$$

$$\begin{array}{r} (x + 3)(x + 6) \\ +3x \\ +6x \\ \hline 9x \end{array}$$

$$\begin{array}{r} (x + 1)(x + 18) \\ +1x \\ +18x \\ \hline 19x \end{array}$$

$$\begin{array}{l} -3 \quad 3 \\ (-3) \quad (+1) \\ (3) \quad (-1) \\ (1) \quad (-3) \\ (-1) \quad (+3) \end{array}$$

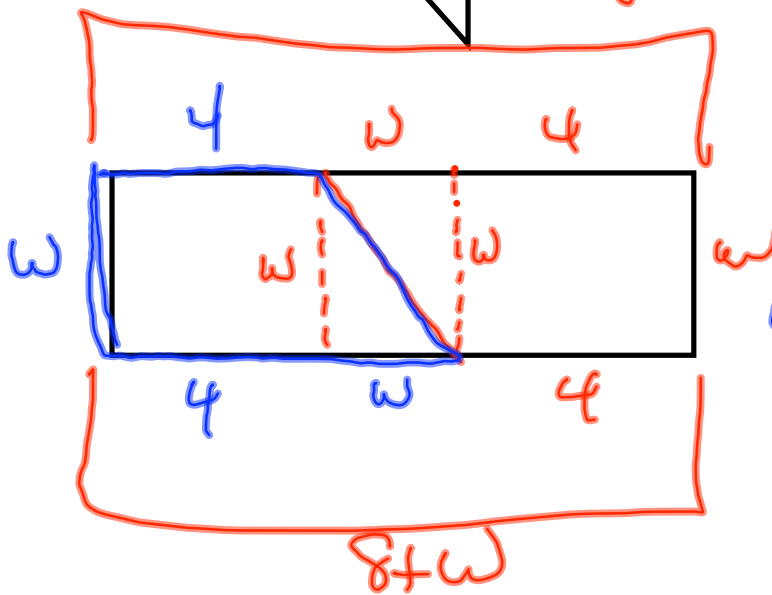


$$w(8+w) = 33$$

$$8w + w^2 = 33$$

$$w^2 + 8w - 33 = 0$$

$$(w+11)(w-3) = 0$$



$$w+11=0$$

$$w = -11$$

$$w-3=0$$

$$w = 3$$