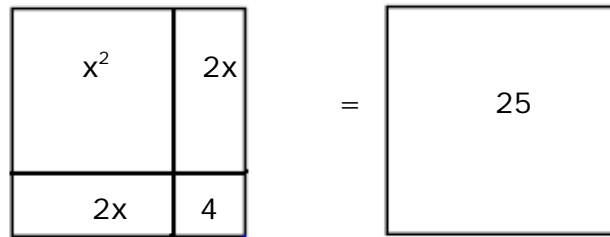


Visualizing the Quadratic Equation with the Area Model - Part II

Recall that if two squares have the same area, then they must have the same dimensions.

If



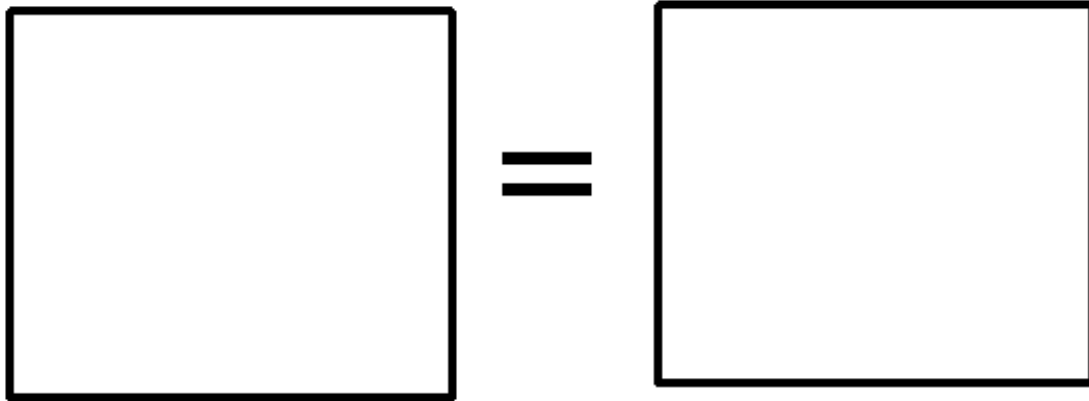
$$(x + 2)^2 = 25$$

Then $x + 2 = \pm\sqrt{25}$

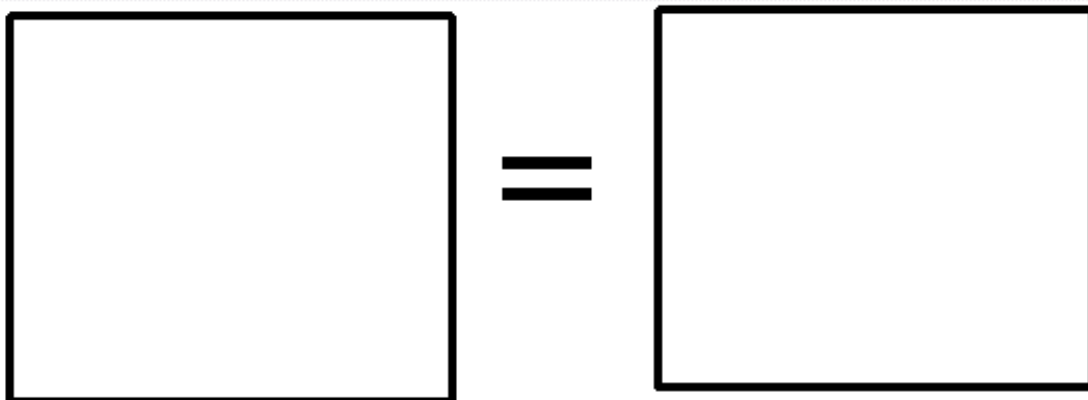
$$x + 2 = \pm 5$$

$$x = +3 \text{ or } -7$$

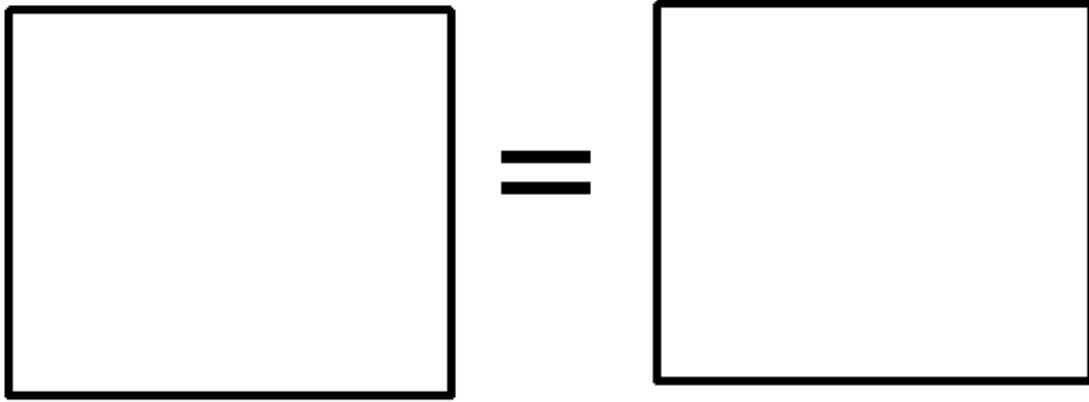
1. Use the following two squares to illustrate $x^2 + 4x + 4 = 9$



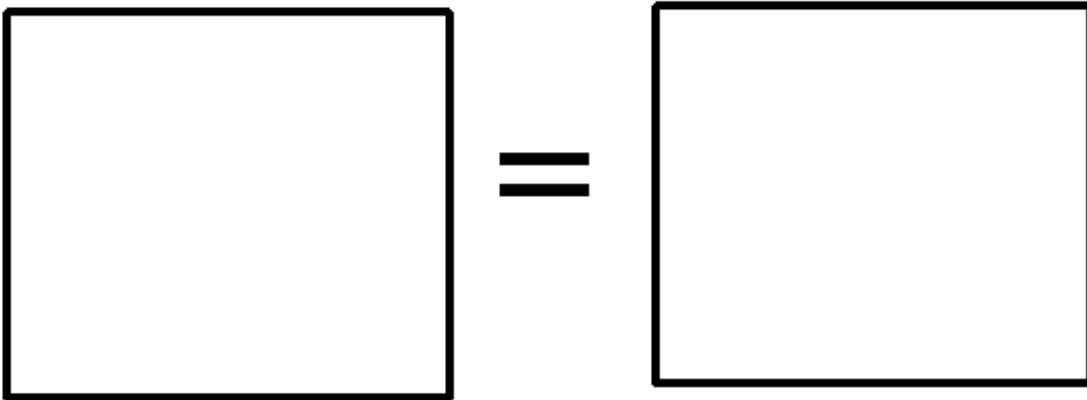
2. Use the area model to illustrate $x^2 + 1x - \frac{3}{4} = 0$



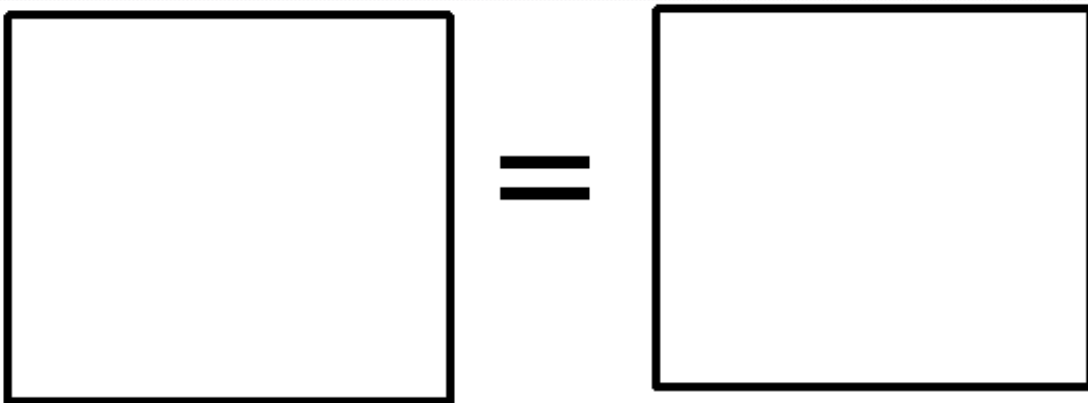
3. Use the area model to set up $x^2 + 3x - 6\frac{3}{4} = 0$.



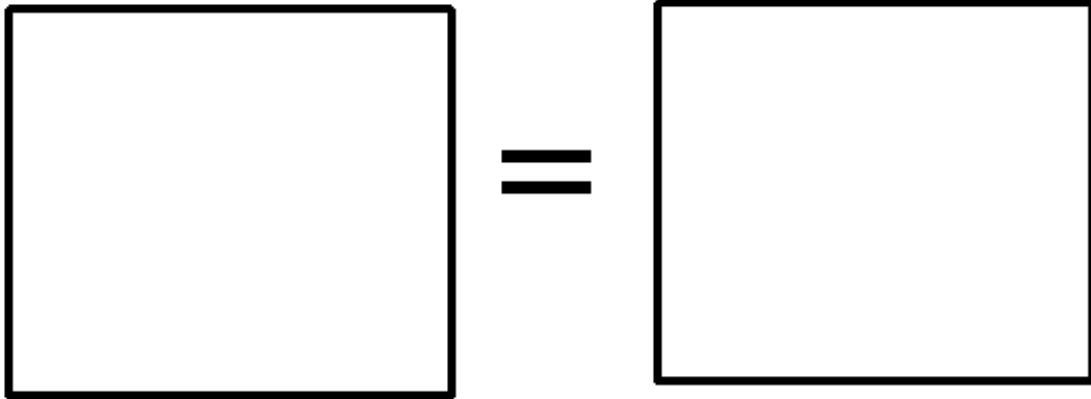
4. Use the area model to set up $x^2 + 3x - 1 = 0$.



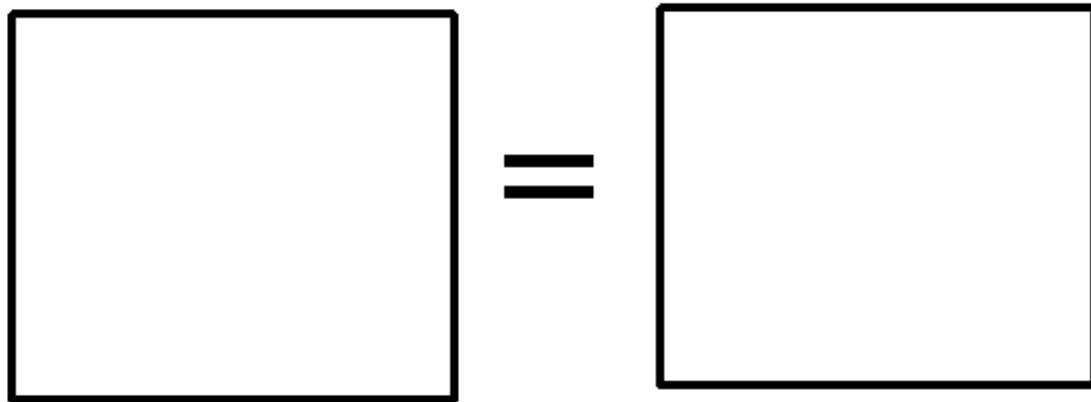
5. Use the area model to set up $x^2 + 5x - 18\frac{3}{4} = 0$.



6. Use the area model to set up $x^2 + 3x - 3 = 0$



7. Use the area model to set up $2x^2 + 3x + \frac{1}{8} = 0$



8. Use the area model to set up $3x^2 + 6x - 6 = 0$

