

Warm up

Review**1) Solve for a:**

$$\begin{array}{lll}
 \text{a) } a + 4 = 10 & \text{b) } a - 12 = 7 & \text{c) } 9 + a = 14 \\
 \cancel{a+4-4} = 10-4 & \cancel{a-12+12} = 7+12 & \cancel{9+9+a} = 14-9 \\
 a = 6 & a = 19 & a = 5
 \end{array}$$

2) Solve the expression when $x = 5$

$$\begin{array}{llll}
 \text{a) } x + 6 & \text{b) } 10 - x & \text{c) } 11 + x & \text{d) } x - 4 \\
 \rightarrow 5 + 6 & 10 - 5 & 11 + 5 & 5 - 4 \\
 11 & 5 & 16 & 1
 \end{array}$$

Review

What does equality mean??

= the same

How can we balance this equation:

$$19 - 17 = 0 + \underline{2}$$

2

Modelling Algebraic Equations

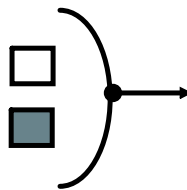
- We sometimes model algebraic expressions to help solve the question.

$$\boxed{} = x$$

$$\square = 1$$

$$\blacksquare = -1$$

we use this one taking a number away

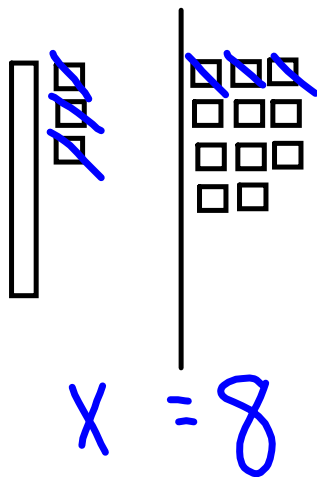
 These would cancel each other out!

Drawing these together, would be like writing:

$1 - 1$

Example

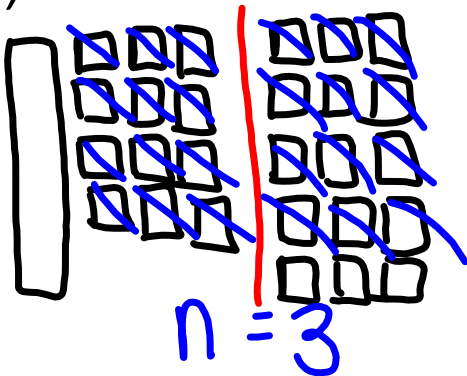
$$x + 3 = 11$$



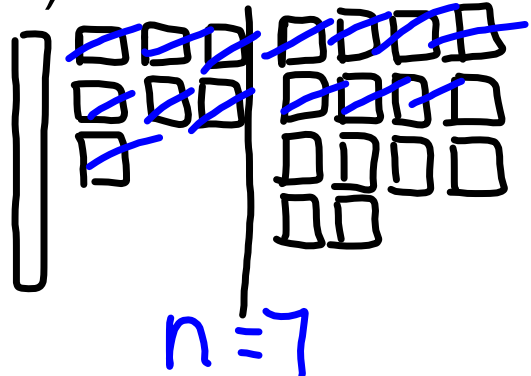
How many cancel out???

Let's model these equations to solve for the unknown variable

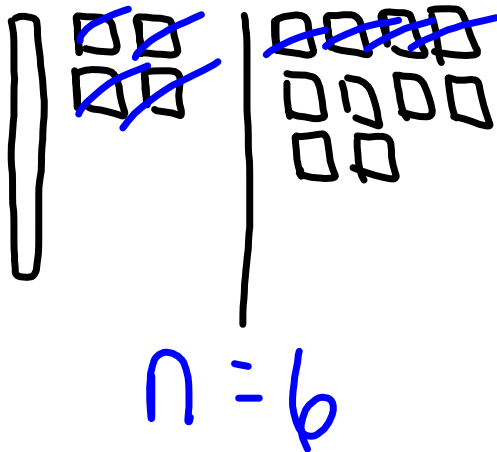
a) $n + 12 = 15$



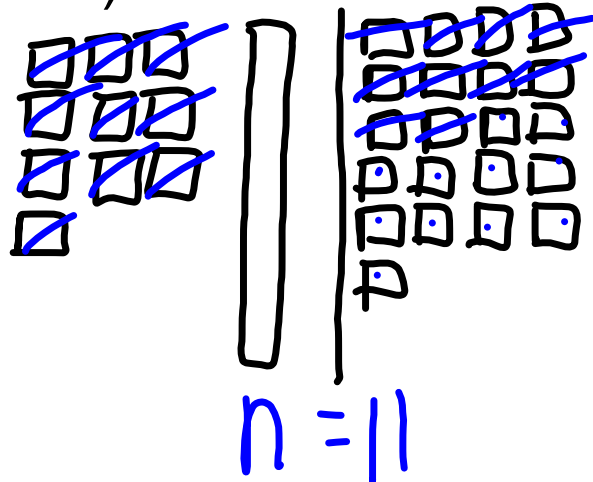
b) $n + 7 = 14$



c) $n + 4 = 10$



c) $10 + n = 21$



Try on your own - MODEL

e) $x + 5 = 7$

f) $c + 13 = 16$

g) $17 + m = 20$

g) $1 + v = 9$

How do we feel about modelling?

