

# December 1, 2014 <sup>7<sup>st</sup></sup> <sup>2<sup>nd</sup></sup> *Starter*

Rob had two cakes at his birthday party - one chocolate and one vanilla. He wanted to give everyone an equal piece of each one but since he liked chocolate better than vanilla and since it was his birthday, he decided to cut the chocolate cake into 9 equal pieces and the vanilla one into 7 equal pieces. He had 2 pieces of the chocolate cake and each of his 7 guests had a piece of each.

How much more/less cake did his guests get using this method rather than cutting both cakes into 8 equal pieces?



*Harlow*

## 12/1 Solving one-step add/subtract equations with integers and decimals

It's balanced when the 2 things weigh the same.

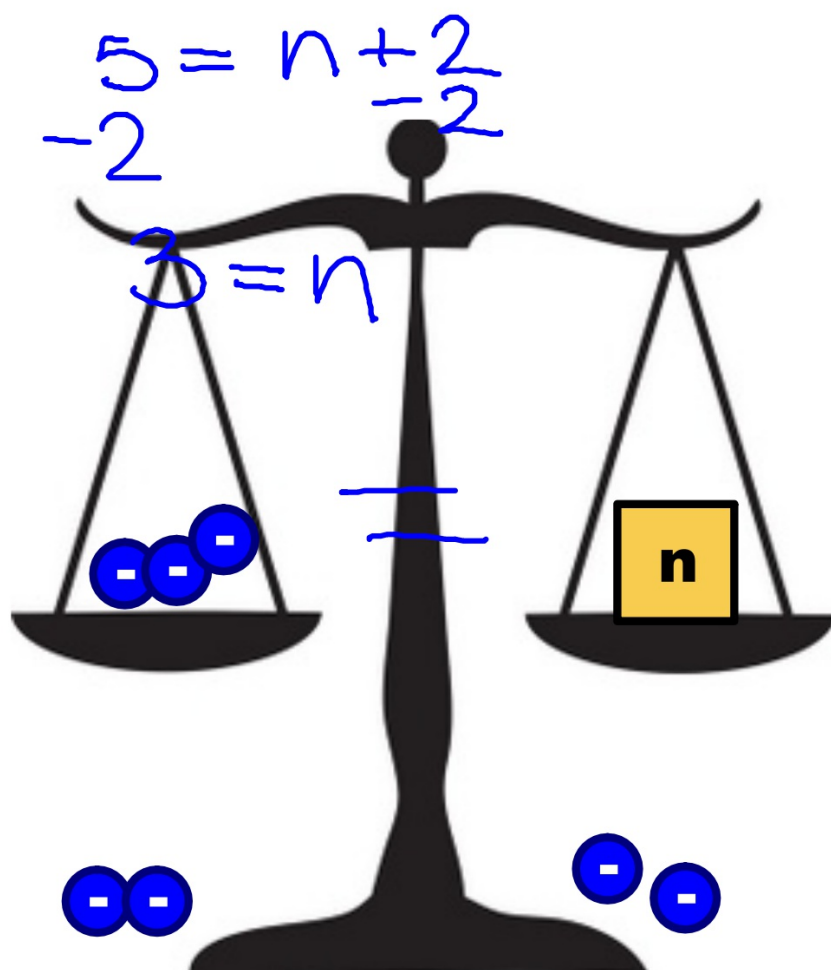
Balance Scale

If you take something off of one side, you have to take the same off of the other.



If you put something on one side you have to put the same thing on the other.

Balanced means EQUAL



*try these...*

$$\begin{array}{r} n - 5 = 9 \\ + 5 \quad | \quad + 5 \\ \hline n = 14 \end{array}$$

$$\begin{array}{r} 14 = x - 7 \\ + 7 \quad | \quad + 7 \\ \hline 21 = x \end{array}$$

$$\begin{array}{r} 6 + k = 11 \\ - 6 \quad | \quad - 6 \\ \hline k = 5 \end{array}$$

$$\begin{array}{r} -8 = y + 8 \\ - 8 \quad | \quad - 8 \\ \hline -16 = y \end{array}$$

*4 things you can do that don't change the balance:*

- 1. Add the same number to both sides*
- 2. Subtract the same number from both sides*
- 3. Switch sides*
- 4. Change the sign of both sides*

$$m + (-4) = -9$$

$$m - 4 = -9$$

$+4 \quad +4$

$$m = -5$$

$$23 = v - (-40)$$

$$23 = v + 40$$

$-40 \quad -40$

$$-17 = v$$

$$-7 - h = 11$$

$$+7 \quad +7$$

$$-h = 18$$

$$h = -18$$

## Now with decimals...

$$\begin{array}{r} x + 17.9 = 4.8 \\ -17.9 \\ \hline x = 13.1 \end{array}$$

$$\begin{array}{r} -10.8 + w = -24.4 \\ +10.8 \\ \hline w = 13.6 \end{array}$$

$$\begin{array}{r} -7.7 = -9.5 + m \\ +9.5 \\ \hline 1.8 = m \end{array}$$

Write the  $-17.9$  on the top, because it's bigger than the  $4.8$  and you need to subtract.

**Homework**

Melon WS 1

**Due** Tuesday