

# November 17, 2014 <sup>1<sup>st</sup></sup> <sup>2<sup>nd</sup></sup>

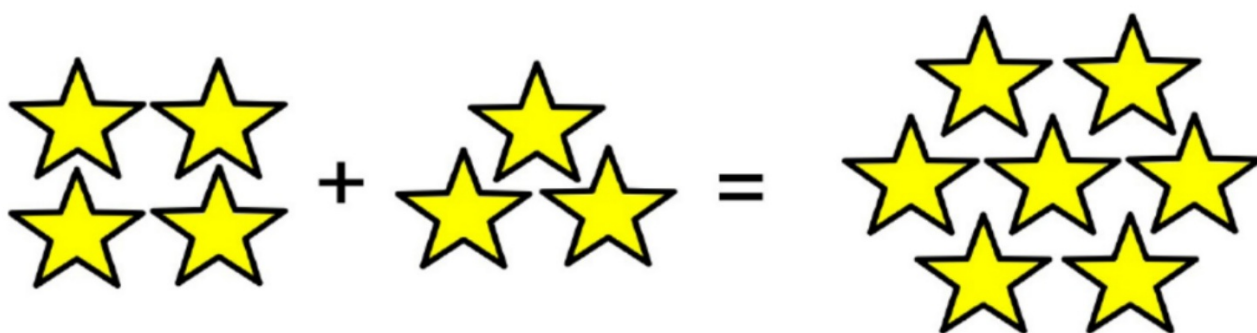
## Starter

If the owner of a pet store puts one canary in each of his cages, he has one extra canary. If he puts 2 canaries in each cage, he has one extra cage. How many cages and canaries does he have?



CoqieBoqie

## 11/17 - Combining LIKE terms

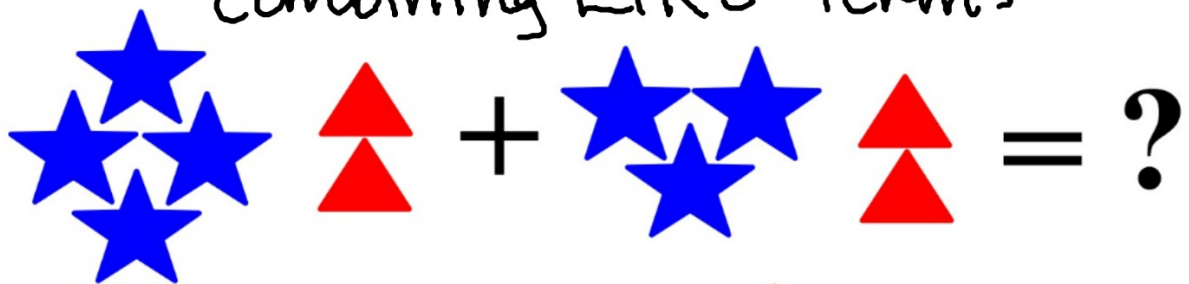


$$4s + 3s = 7s$$

$$5t + 3t = 8t$$

$$10r - 7r = 3r$$

Combining LIKE terms



$$4s + 2t + 3s + 2t = ?$$

$$7s + 4t$$

## Simplify by combining like terms.

$$\begin{array}{r} 7r + 3 + 6 \\ \vdots \quad ||| \quad \#\# | \\ = 7r + 9 \end{array}$$

$$\begin{array}{r} \underline{2} - \underline{7a} + \underline{a} + \underline{9} \\ = -6a + 11 \end{array}$$

Variable part goes first!

$$\begin{array}{r} \underline{1n} - \underline{2} + \underline{2n} \\ = -1n - 2 \\ = -n - 2 \end{array}$$

$$\begin{array}{r} 9x + \underline{9} - \underline{10} - 5x \\ = 4x - 1 \end{array}$$

↖ The negative becomes the subtract.

Terms without variable are called "constant"

## Now with decimals...

Number in front of the variable is the "coefficient"

$$\begin{aligned} & \underline{3.4x} - \underline{4.5} + \underline{6.2x} \\ &= 9.6x - 4.5 \end{aligned}$$

$$\begin{aligned} & \underline{2.16r} - \underline{6.3} - \underline{7r} + \underline{6.8} \\ &= -4.84r + 0.5 \end{aligned}$$

$$\begin{array}{r} 3.4 \\ 6.2 \\ \hline 9.6 \end{array}$$

$$\begin{array}{r} 69 \\ -7.00 \\ +2.16 \\ \hline -4.84 \end{array}$$

$$\begin{array}{r} +6.8 \\ -6.3 \\ \hline 0.5 \end{array}$$

## And fractions...

$$\begin{aligned} -2\frac{1}{6}n + 1\frac{1}{6}n \\ = -3\frac{1}{3}n \end{aligned}$$

$$\begin{array}{r} -2\frac{1}{6} \\ -1\frac{1}{6} \\ \hline -3\frac{2}{6} \end{array}$$

$$\begin{aligned} 1\frac{2}{3}x - \frac{3}{4} + 1\frac{5}{6}x \\ = 3\frac{1}{2}x - \frac{3}{4} \end{aligned}$$

$$\begin{array}{r} 1\frac{2}{3} \\ + 1\frac{5}{6} \\ \hline 2\frac{9}{6} = 3\frac{3}{6} \end{array}$$

$$\begin{aligned} -4\frac{3}{5}a + 2\frac{3}{4} - 3\frac{1}{3} \\ = -4\frac{3}{5}a - \frac{7}{12} \end{aligned}$$

$$\begin{array}{r} -2\frac{1}{3} \frac{16}{12} \\ + 2\frac{3}{4} \frac{9}{12} \\ \hline -\frac{7}{12} \end{array}$$

# Homework

Lilac WS 1

Due Tuesday