

Mindfulness:

Choose Your Breath:

Initial (focus on breathing)

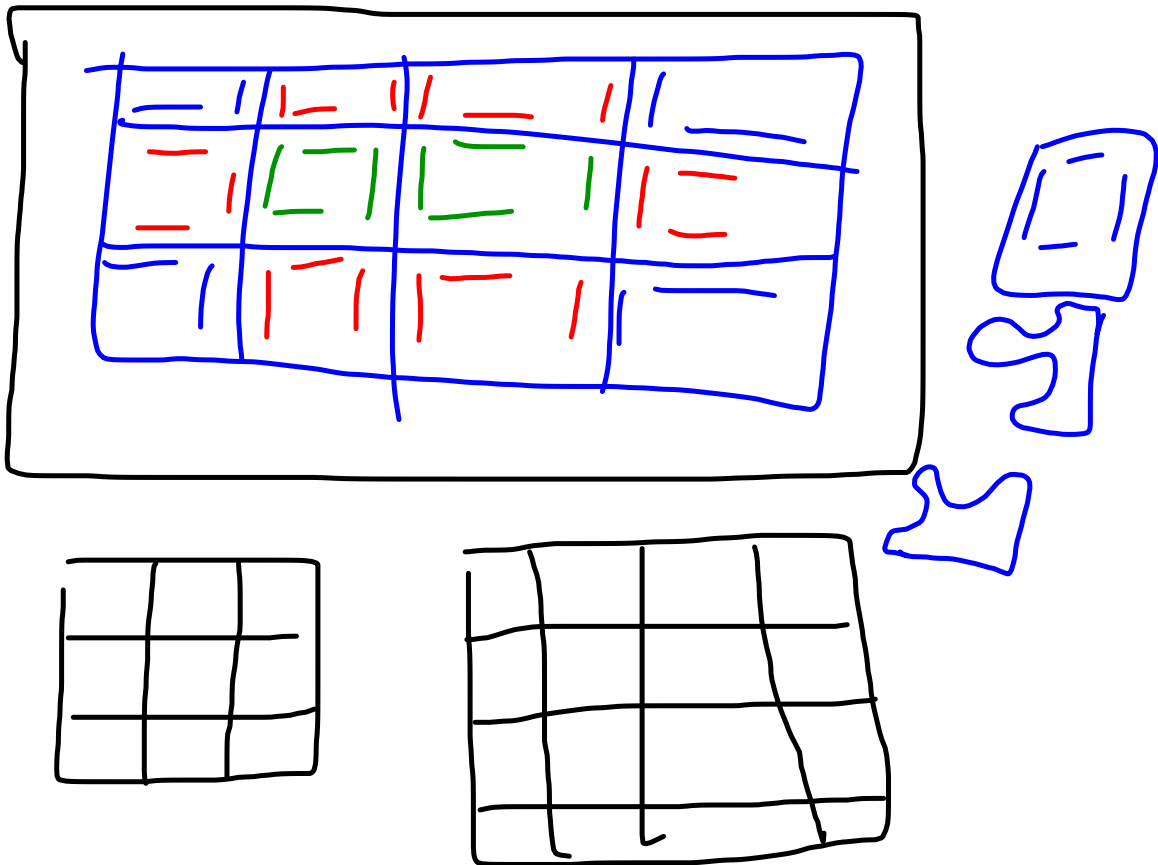
Heart/Belly

Calming (2 in, 4 out)

Energizing (4 in, 2 out)

Bell Ringer:

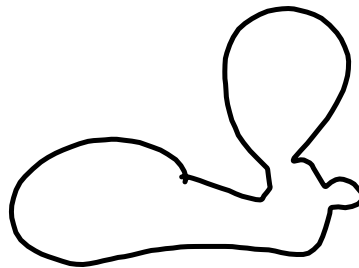
Debrief yesterday's group work



$$\frac{1}{4}, \frac{5}{20}, \frac{3}{12}, \underline{\hspace{2cm}}$$

2\_      ~~2\_~~  
2\_      ~~2\_~~

$$\frac{3}{4}x - S = 4 + S$$



MULT.  
By  $\frac{3}{4}$

Subtract S  
from  
product

$$\frac{3}{4}x = \frac{9}{\frac{3}{4}}$$

$$x = \frac{4}{3} \cdot 3 = \textcircled{12}$$

$$3 + \frac{x}{12} = \frac{x}{4} - 5$$

$$8 + \frac{x}{12} = \frac{x}{4} - \frac{x}{12}$$

$$8 = \frac{3x}{12} - \frac{x}{12}$$

$$8 = \frac{2x}{12} \rightarrow 8 = \frac{x}{6} \cdot 6$$

$$x = 48$$

$$12 \left( 3 + \frac{x}{12} = \frac{x}{4} - 5 \right)$$

$$36 + x = 3x - 60$$

$$60 \qquad +60$$

$$96 + \cancel{x} = 3x + \cancel{x}$$

$$\frac{96}{2} = \frac{2x}{2}$$

$$x = 48$$

$$8) (x-1)(x+5) = x^2 + 6x + 9$$

$$x^2 + 5x - x - 5 = x^2 + 6x + 9$$

$$\cancel{x^2} + \cancel{4x} - 5 - 9 = \cancel{x^2} + 6x + \cancel{9}$$

$$\frac{-14}{2} = \frac{2}{2}x$$

$$x = -7$$

DISTR.

ADD  
PROP EQMULT  
PROP  
EQ



**Exercise #1:** Let's work with just two consecutive integers first. Say we have two consecutive integers whose sum is eleven less than three times the smaller integer.

- (a) It is important to play around with this problem numerically. So, try a variety of combinations and see if you can find the correct pair of consecutive integers. Be sure to show your calculations.

~~2,3~~   ~~11,12~~   ~~1,2~~   ~~8,9~~  
~~4,5~~   ~~14,15~~   ~~6,7~~   12,13 = 25  
~~7,8~~   ~~16,17~~   ~~5,6~~

- (b) Now, carefully set up let statements that give expressions for our two consecutive integers. Using these expressions, set up an equation that allows you to find them and solve the equation.

let 1st integer =  $x$   
 let 2nd int. =  $x+1$

$$\underline{x} + (\underline{x+1}) = 3x - 11$$

$$2x + 1 = 3x - 11$$

$$\begin{array}{r}
 \cancel{2x} + 12 = \cancel{3x} \\
 \cancel{-2x} \qquad \quad \cancel{-2x}
 \end{array}$$

$$12 = x$$

$$13 = x + 1$$

