

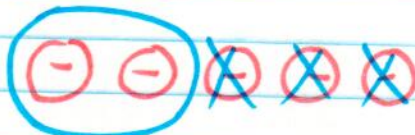
### 1.3 Activity: Subtracting Integers

$$\textcircled{+} + \textcircled{-} = \text{zero pair}$$

$$5 - 3 = 2$$



$$-5 - (-3) = -2$$



$$-5 - 3 = -8$$



$$5 - (-3) = 8$$



RPS p. 11 (1-3)

### 1.3 Subtracting Integers p. 16

- \* don't subtract (add)
- \* change subtraction to addition
- \* change the sign of the following number to its opposite (additive inverse)

- keep, change, change
- add the opposite
- "boom boom"

• copy, switch, opposite

\* follow the rules for addition (song)

#### Examples

|                      |   | <u>New Problem (addition)</u>       |
|----------------------|---|-------------------------------------|
| a) $5 - (-5)$        | → | $5 + 5 = 10$                        |
| b) $-3 - 1$          | → | $-3 + (-1) = -4$                    |
| c) $-8 - (-13)$      | → | $-8 + 13 = 5$                       |
| d) $9 - 12$          | → | $9 + (-12) = -3$                    |
| e) $-3 - 1 - (-4)$   | → | $-3 + (-1) + 4 = 0$                 |
| f) $5 - (-3) + (-6)$ | → | $5 + 3 + (-6) = 2$                  |
| g) $8 - 2 - (-4)$    | → | $8 + (-2) + 4 = 10$                 |
| h) $-12 - (-3) + 8$  | → | $-12 + 3 + 8 = -1$                  |
| i) $15 - (-20) - 20$ | → | $15 + 20 + (-20) = 15$              |
| j) $10 - 7 = 3$      |   | (don't have to change this problem) |

Evaluate: (solve)

k)  $b - (-8)$   
 $-6 + (+8)$   
 $-6 + 8$   
 $\boxed{2}$

$a = -3$     $b = -6$     $c = 9$   
l)  $|b - a| = |-6 - (-3)|$   
 $|-6 + 3| = |-3| = \boxed{3}$

m)  $a - b - c$   
 $-3 - (-6) - 9$   
 $-3 + 6 + (-9)$   
 $-12 + 6$   
 $\boxed{-6}$

n)  $c - a + b$   
 $9 - (-3) + (-6)$   
 $9 + 3 + (-6)$   
 $12 + (-6)$   
 $\boxed{6}$