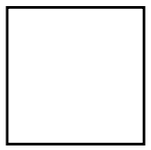
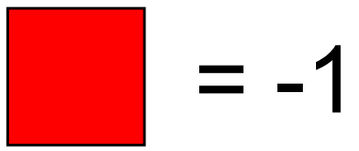
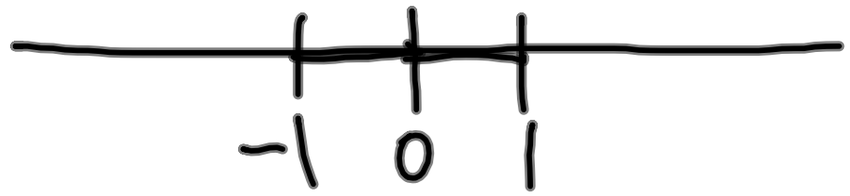
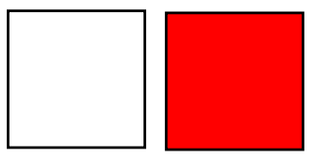
2.2-2.3 Adding and Subtracting Real Numbers


= +1

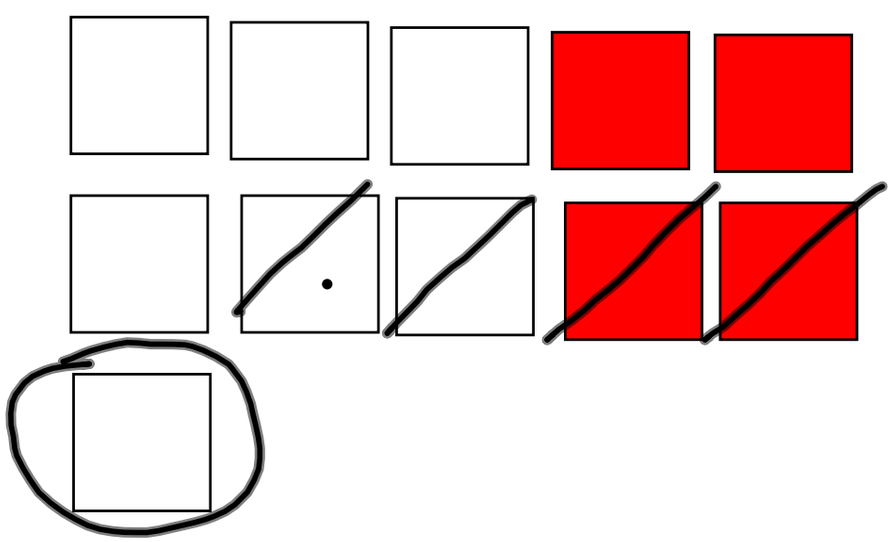

= -1



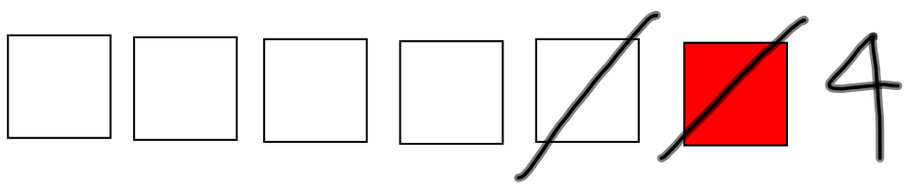


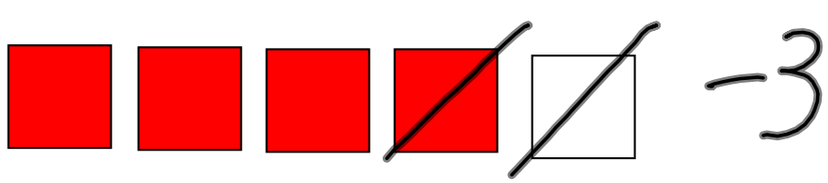
= Zero pair

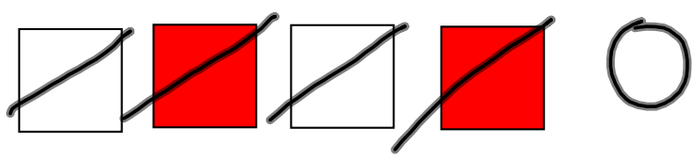
ex. 1

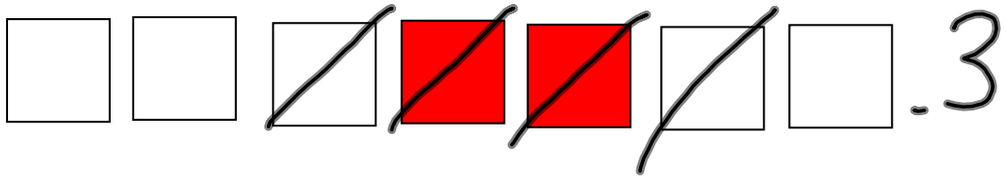


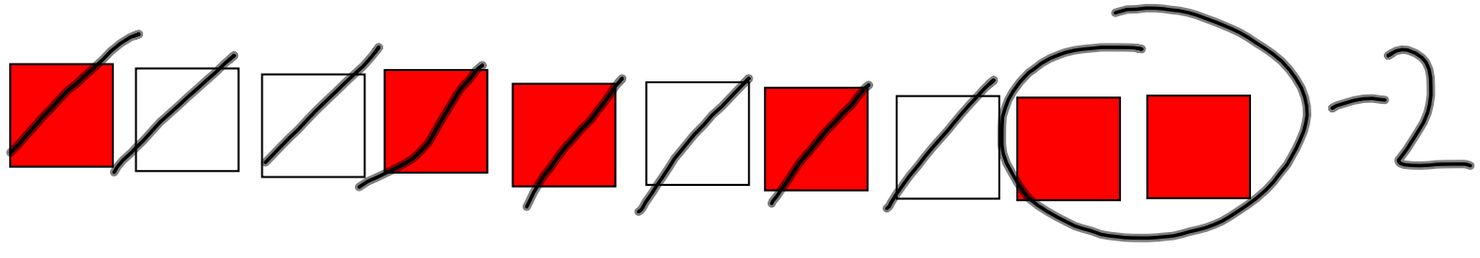
Examples



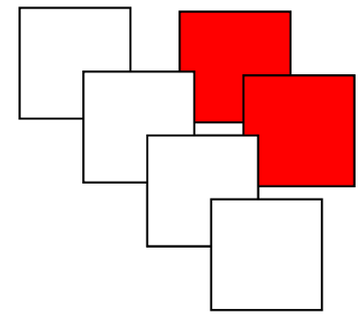




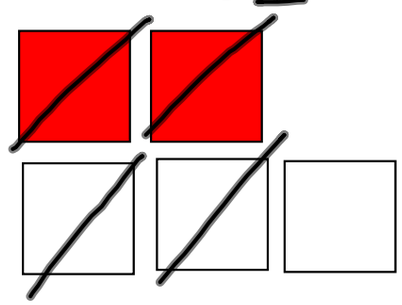




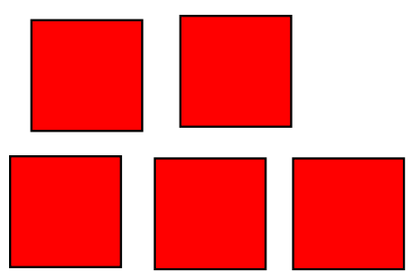
Adding Integers

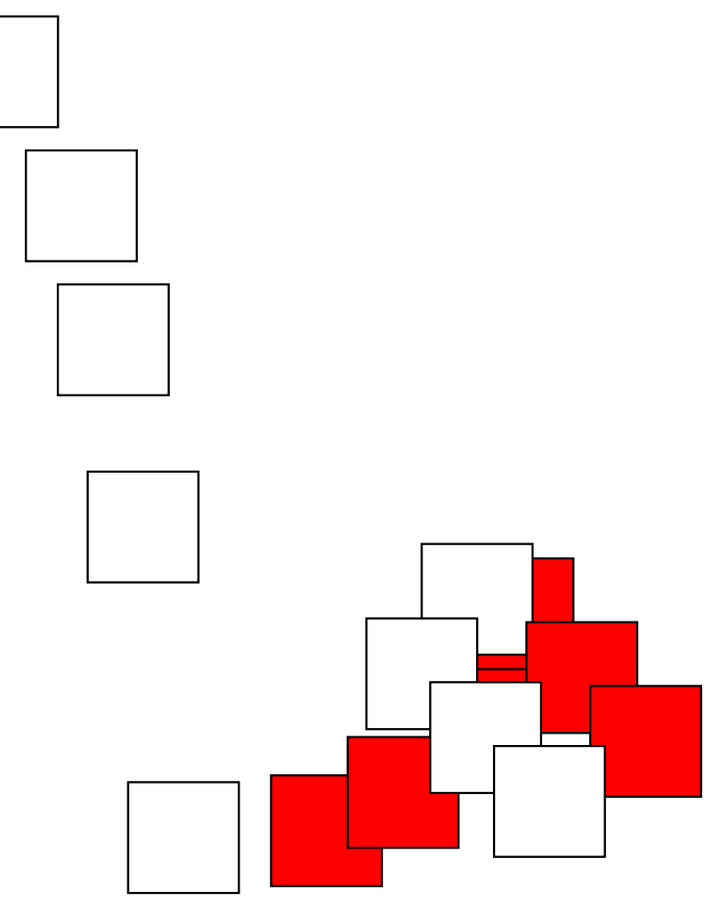


-2 + 3 =1



-2 + -3





Other Examples:

-5 + 2 −3

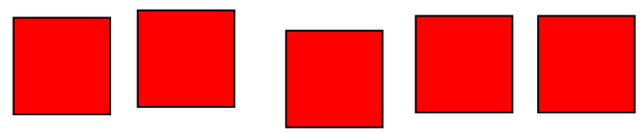
3 + -3

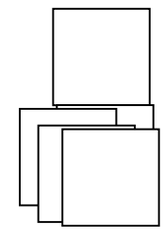
-1 + 4

5 + -6

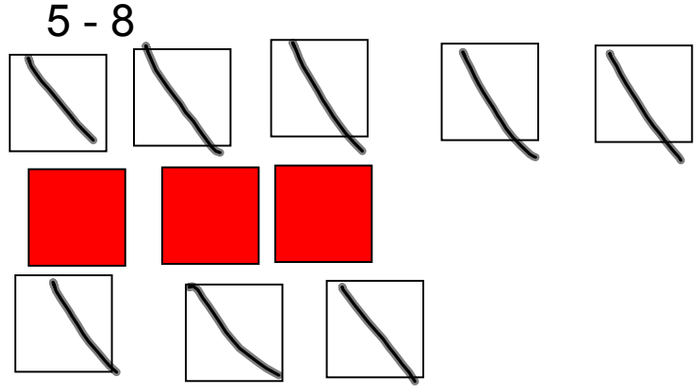
Subtracting Real Numbers

-2 - 3 = -5

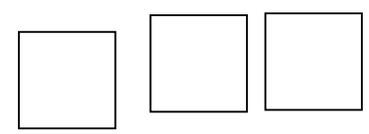




5 - 8

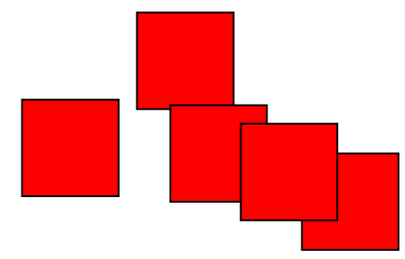


-2 - -5



Other Examples

4 - -2

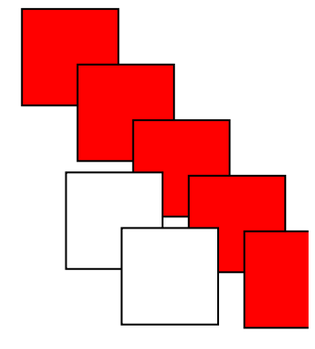


-3 - -2

-6 - 1

6 - 3

0 - 4



Patterns of Adding and Subtracting Real Numbers

add + & + = +

add − & − = −

communitiv

3+4 = 7

4+3

Subtract a −

−(−) +

3−4 = −1

4−3 = 1

Notecard- Adding and Subtracting Real Numbers

Addition

Commutative Property:
$a + b = b + a$

Associative Property:
$(a + b) + c = a + (b + c)$

Identity Property:
$a + 0 = a$

Property of Zero (zero Pair)
$a + (-a) = 0$

Subtraction

To subtract b from a, add the opposite of b to a

$a - b = a + (-b)$

Adding and Subtracting Fractions

$$\frac{1}{2}+\frac{1}{2}=\frac{2}{2}=1$$

If two fractions have the same denominator then...

add numerators

$$\frac{4}{5}-\frac{3}{5}=\frac{1}{5}$$

$$5\left(\frac{1}{3}\right)+\left(\frac{2}{5}\right)3=\frac{5}{15}+\frac{6}{15}=\frac{11}{15}$$

If two fractions have different denominators then...

Find a common denominator

1. Find the LCM

$$\frac{2}{3}-\frac{1}{4}$$

IMPORTANT: We never add or subtract the denominators!!!