

Unit 2: Day 4.5



Warm Up Grade 7



1) Represent the scenario with an integer

- a) Earned \$7 b) lost 67 pounds c) deposit 4 coins
 (+7) (-67) (+4)

2) Order integers from smallest to largest or largest to smallest

~~-11, 0, +3, -14, +23~~ Small → large
 -14, -11, 0, +3, +23

3) Place <, >, or = into the blank a) +7 > -3 b) -4 > -5

4) Model an integer in 2 different ways

Ex) Model + 5

1st way



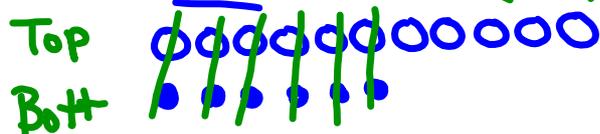
2nd way

Assessment Question



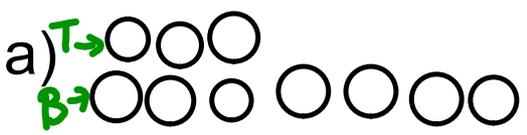
5) Add the integers using tiles (Doing this today)

ex) ^{Top}(-11) + ^{Bottom}(+6) = (-5)

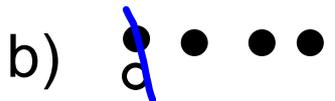


6) Write the addition statement for the following

(Top) + (Bottom) = ()



(-3) + (-7) = (-10)



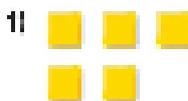
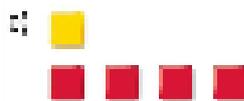
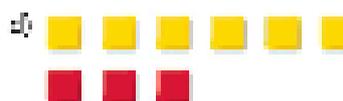
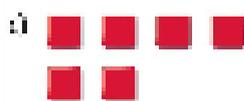
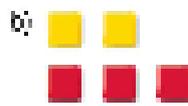
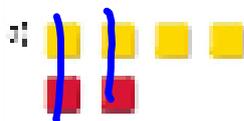
(+4) + (-1) = (+3)

Homework solutions

Use coloured tiles.

1. What sum does each set of tiles model?

Write the addition equation.



→ a) $(+4) + (-2) = +2$

b) $(+2) + (-3) = -1$

→ c) $(-4) + (-2) = -6$

d) $(+6) + (-3) = +3$

→ e) $(+1) + (-4) = -3$

f) $(+3) + (+2) = +5$

2. What sum does each set of tiles model?

How do you know you are correct?

a) 3 yellow tiles and 2 red tiles

b) 3 yellow tiles and 4 red tiles

c) 2 red tiles and 2 yellow tiles

~~oo~~ a) $(+3) + (-2) = +1$
~~oo~~ b) $(+3) + (-4) = -1$
~~oo~~ c) $(-2) + (+2) = 0$

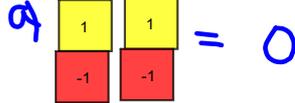
3. Use coloured tiles to represent each sum. Find each sum. Homework solutions

Sketch the tiles you used. What do you notice?

a) $(+2) + (-2)$

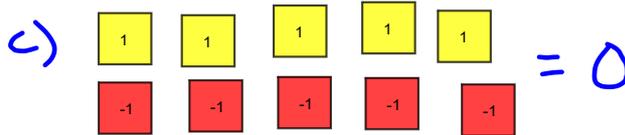
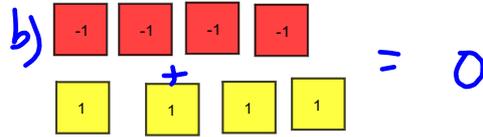


b) $(-4) + (+4)$



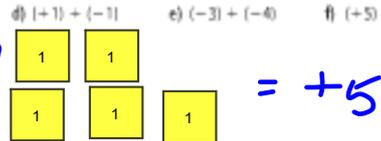
c) $(+5) + (-5)$

b)

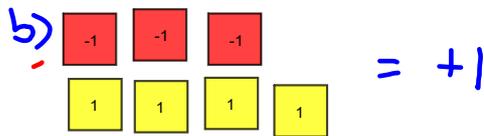


4. Add. Sketch coloured tiles to show how you did it.

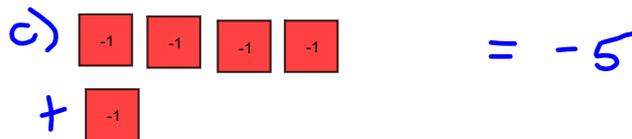
a) $(+2) + (+3)$



b) $(-3) + (+4)$



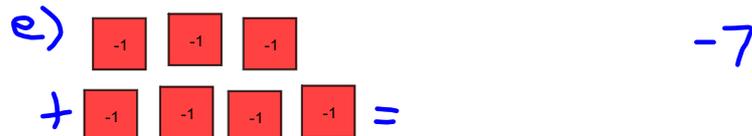
c) $(-4) + (-1)$



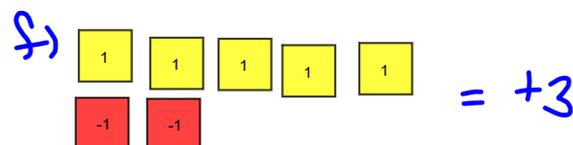
d) $(+1) + (-1)$



e) $(-3) + (-4)$



f) $(+5) + (-2)$



Homework solutions

5. Add. Write the addition equations.

a) $(+4) + (+3)$

b) $(-7) + (+5)$

c) $(-4) + (-5)$

d) $(+8) + (-1)$

e) $(-10) + (-6)$

f) $(+4) + (-13)$

a) $+4 + (+3) = +7$



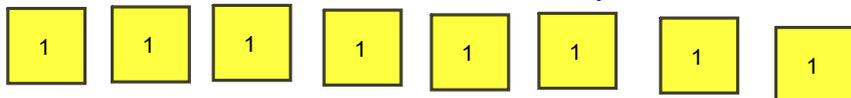
b) $(-7) + (+5) = -2$



c) $(-4) + (-5) = -9$



d) $(+8) + (-1) = +7$



e) $(-10) + (-6) = -16$



f) $(+4) + (-13) = -9$



Homework solutions

6. Represent each sentence with integers, then find each sum.

a) The temperature drops 3°C and rises 4°C .

b) Marie earned $\$5$ and spent $\$3$.

c) A stock rises 15¢ , then falls 7¢ .

d) Jerome moves his game piece 3 squares backward, then 8 squares forward.

e) Duma deposits $\$12$, then withdraws $\$5$.

Model

$$a) (-3) + (+4) = +1$$

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

$$c) (+15) + (-7) = +8$$

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

$$e) (+12) + (-5) = +7$$

Homework solutions

8. Copy and complete.

a) $(+5) + \square = +8$

b) $\square + (-3) = -4$

c) $(+3) + \square = +1$

d) $(-5) + \square = -3$

e) $(+2) + \square = +1$

f) $\square + (-6) = 0$

9. Assessment Focus

a) Add: $(+3) + (-7)$

b) Suppose you add the integers in the opposite order:

$(-7) + (+3)$. Does the sum change?

1

Use coloured tile drawings and words to explain the result.

c) How is $(-3) + (+7)$ different from $(+3) + (-7)$? Explain.

-1

d) Repeat parts a to c with a sum of integers of your choice.

What do you notice?

a)

$= -4$

b) $(-7) + (+3)$

$= -4$

Homework solutions

10. **Take It Further** Add. Sketch coloured tiles to show how you did it.

a) $(+1) + (+2) + (+3)$

b) $(+2) + (-1) + (+3)$

c) $(-3) + (-1) + (-1)$

d) $(+4) + (-3) + (+1)$

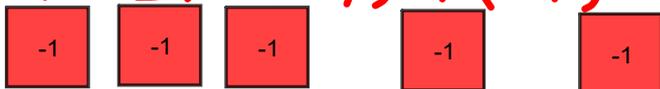
$$a) (+1) + (+2) + (+3) = +6$$



$$b) (+2) + (-1) + (+3) = +4$$



$$c) (-3) + (-1) + (-1) = -5$$

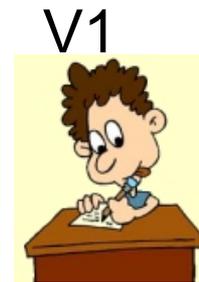


$$d) (+4) + (-3) + (+1) = +2$$



QUIZ

Tomorrow



V2

Similar to warm up

Class/Homework

Extra Practice Worksheet

red → unshaded ○ → negative (-)
yellow → shaded ● → positive (+)

Extra Practice 1- #1, 2, 3, 4

Extra Practice 2- #1, #2ab

a)  (-4)

b)



Do this without tiles

Master

Extra Practice 1

Lesson 2.1: Representing Integers

1. Write the integer modelled by each set of tiles.

a) R R R R

b) Y Y Y Y Y Y

c) Y Y Y Y
R R Rd) Y Y Y
R R R R R R R Re) Y Y Y Y
R R R Rf) Y Y Y Y Y
R R

2. Use coloured tiles. Draw two different models for each integer.

a) -7 b) $+8$ c) -2 d) $+6$

3. Which integer is modelled by each set of tiles?

a) 5 yellow tiles and 13 red tiles

b) 28 yellow tiles and 24 red tiles

c) 15 yellow tiles and 8 red tiles

d) 37 yellow tiles and 41 red tiles

4. a) You have 3 yellow tiles and want to model -4 .

How many red tiles do you need?

b) You have 6 red tiles and want to model $+7$.

How many yellow tiles do you need?

c) You have 5 yellow tiles and want to model $+2$.

How many red tiles do you need?

d) You have 8 red tiles and want to model -5 .

How many yellow tiles do you need?

Master

Extra Practice 2

Lesson 2.2: Adding Integers with Tiles

Use coloured tiles.

1. Find each sum.

a) $(+6) + (-12)$

b) $(-10) + (-4)$

c) $(-8) + (-9)$

d) $(+11) + (+7)$

e) $(-13) + (+5)$

f) $(+12) + (-6)$

2. Represent each sentence with integers, then find each sum.

What does the sum represent?

a) The elevation of the base of the building is 345 m above sea level.
The building is 50 m high.

b) The elevation of the base of the building is 75 m below sea level.
The building is 15 m high.

c) The elevation of the top of the trench is 237 m below sea level.
The trench is 10 m deep.

d) The elevation of the entrance to the mine is 1500 m above sea level.
The mine is 450 m deep.

3. These are the scores on each hole of mini-golf. Find the total score.

Score	-2	+1	0	+3	-1	+2	-1	0	-2
-------	----	----	---	----	----	----	----	---	----

4. Complete each magic square.

a)

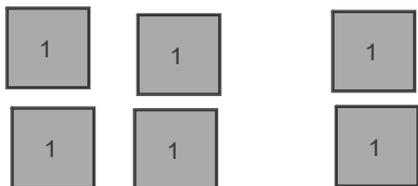
		+3
	+2	
+1		-1

b)

-7			+8
	+6	-5	-3
	-1	+2	
	+3		+1

Modeling Integer Addition

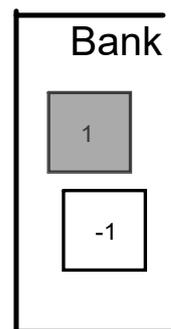
$(+4) + (+2)$



$(-3) + (-3)$



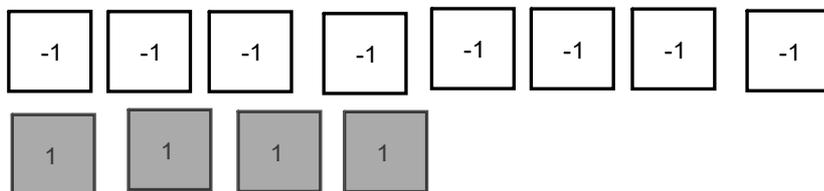
$(-2) + (-5)$



$(+4) + (-3)$

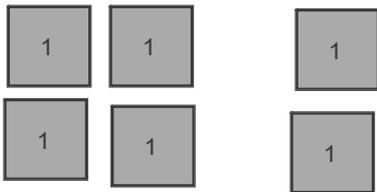


$(-8) + (+4)$



Modeling Integer Addition

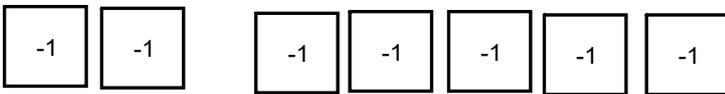
$(+4) + (+2)$



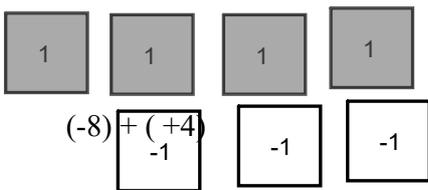
$(-3) + (-3)$



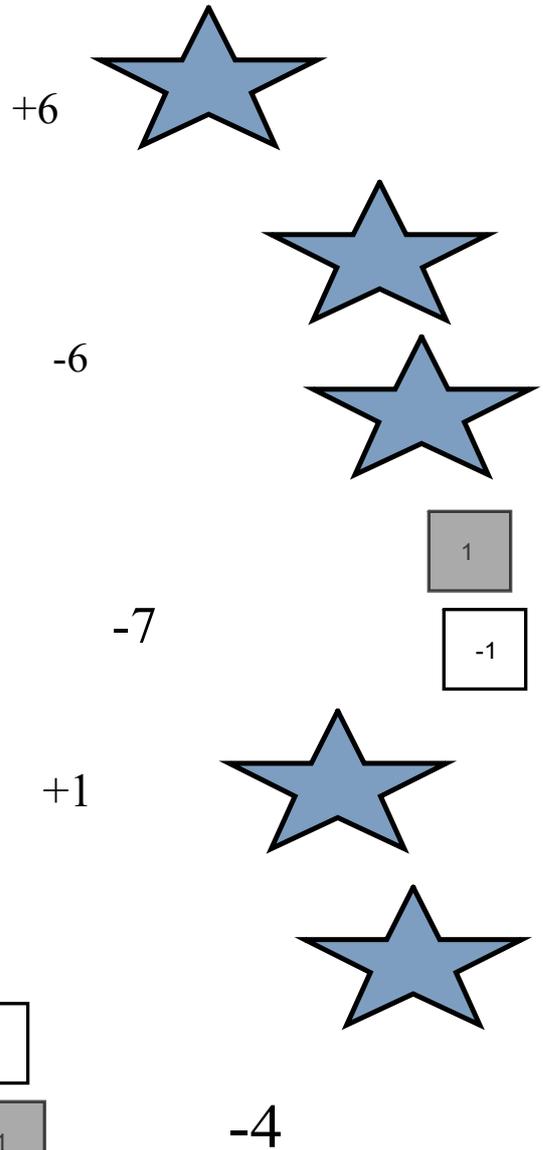
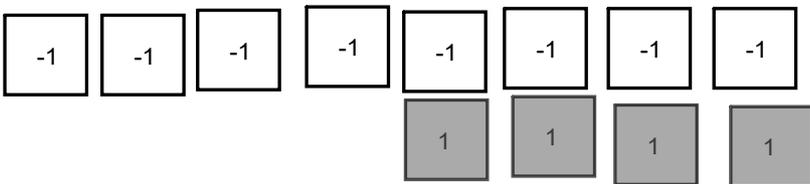
$(-2) + (-5)$



$(+4) + (-3)$



$(-8) + (+4)$



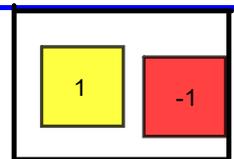
Try these:

(a) $(-6) + (+2)$

(b) $(-3) + (-2)$

(c) $(+2) + (-7)$

(d) $(-4) + (+5)$

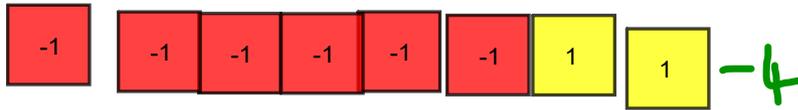


(e) $(+1) + (-5)$

Homework pg. 58

Try these:

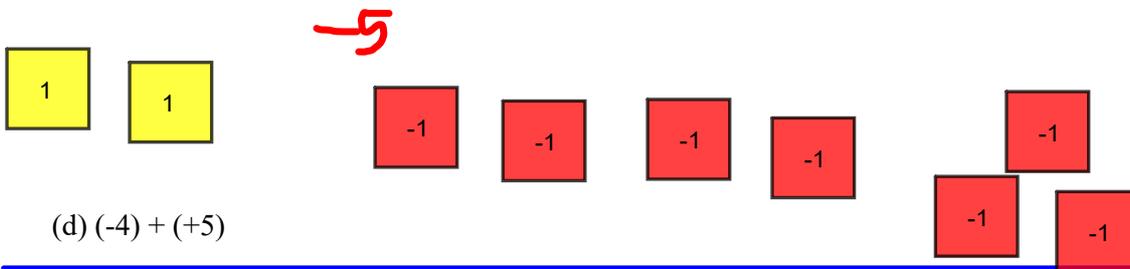
(a) $(-6) + (+2)$



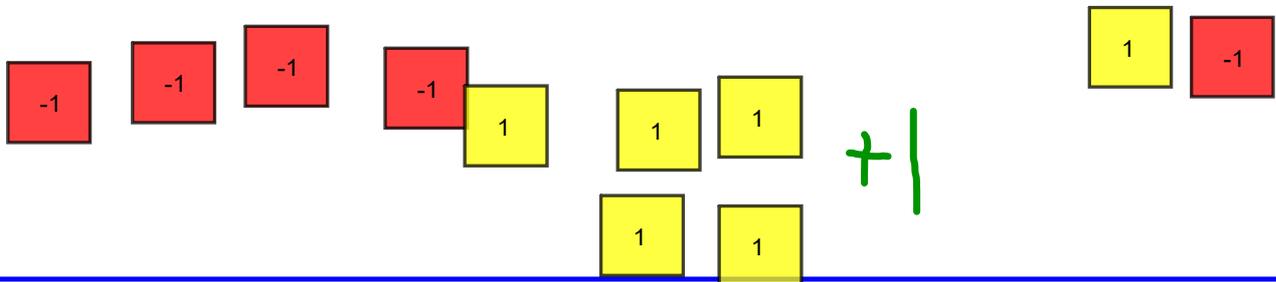
(b) $(-3) + (-2)$



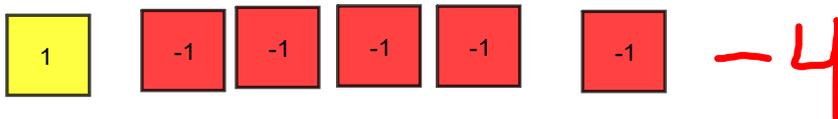
(c) $(+2) + (-7)$



(d) $(-4) + (+5)$



(e) $(+1) + (-5)$

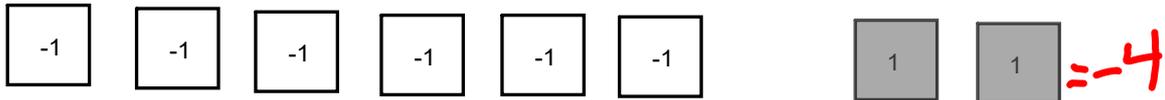


Homework pg. 58 # 1-6, 9, 10



Try these:

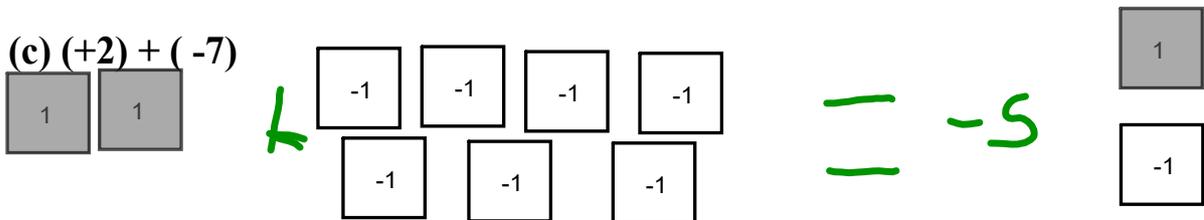
(a) $(-6) + (+2)$



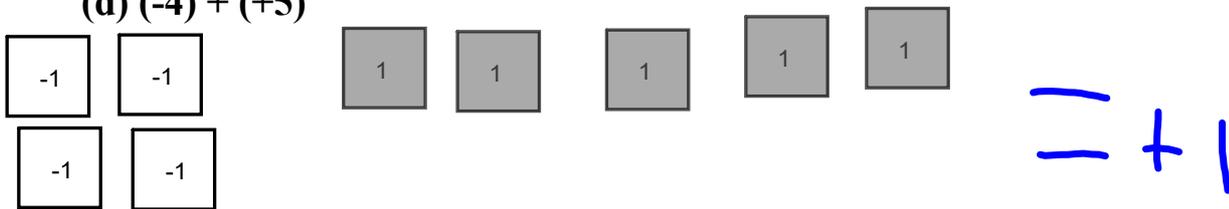
(b) $(-3) + (-2)$



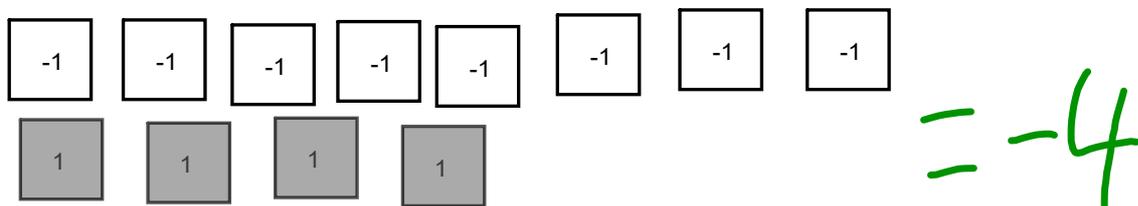
(c) $(+2) + (-7)$



(d) $(-4) + (+5)$



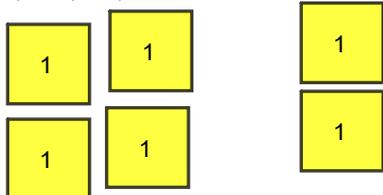
(e) $(-8) + (+4)$



Homework pg. 58 # 1-6, 9, 10

Modeling Integer Addition

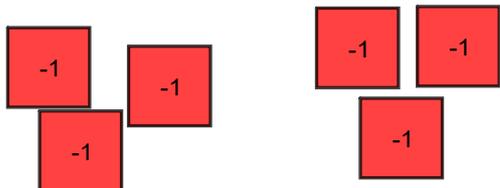
$(+4) + (+2)$



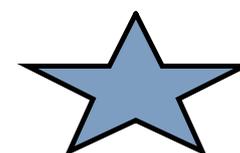
+6



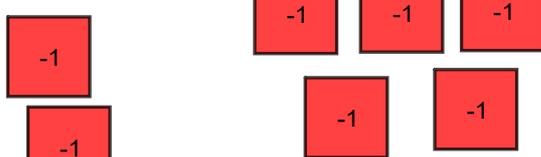
$(-3) + (-3)$



-6



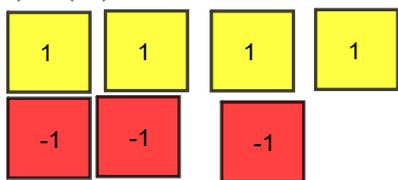
$(-2) + (-5)$



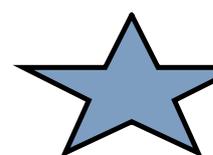
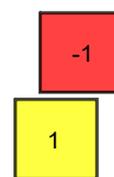
-7



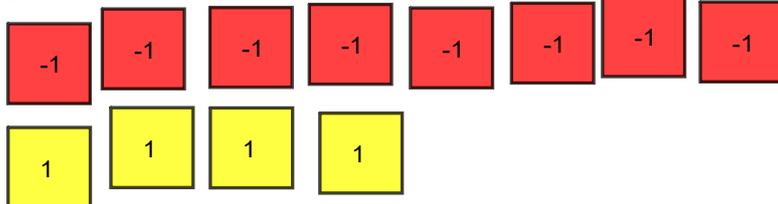
$(+4) + (-3)$



+1



$(-8) + (+4)$

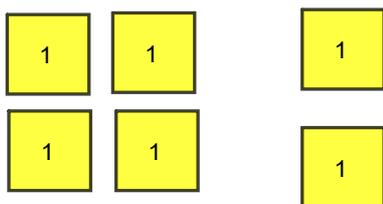


-4

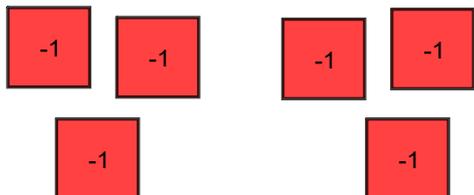


Modeling Integer Addition

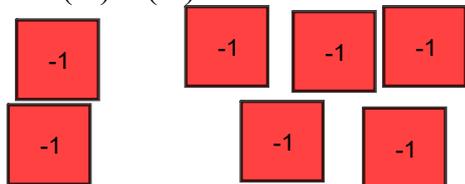
$(+4) + (+2)$



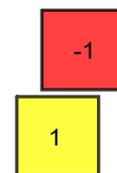
$(-3) + (-3)$



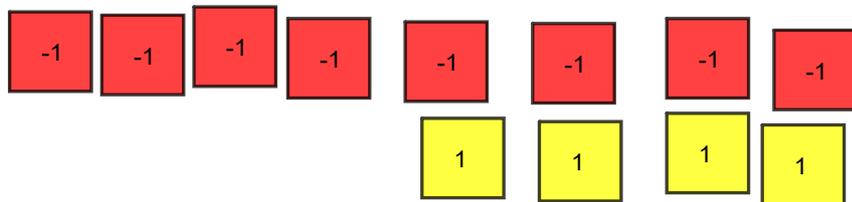
$(-2) + (-5)$



$(+4) + (-3)$



$(-8) + (+4)$



Attachments

 Gr 7 Math Unit 1_Ch 2_ Integers Day 4.5_ Integers adding Extra Pr 1_2.pdf