Grade 7

Date:_____

Warm Up

Test Outline

V1 2025 Test

Part A: 7 Multiple Choice

Part B: Short Response (#1 to #8)

#1) Write addition statement for tiles

#2) Use tiles to Subtract

#3) Represent the scenario with integer operations

#4) Use Subtraction rule

#5) Use Subtraction rule

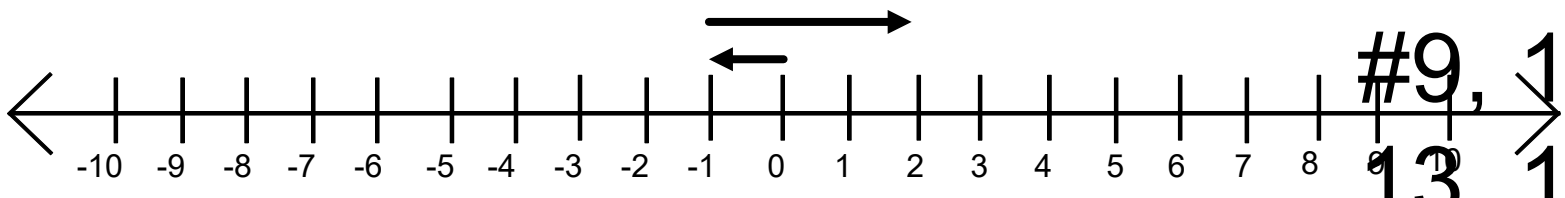
#6) Complete the pattern

#7, #8) Use Subtraction rule

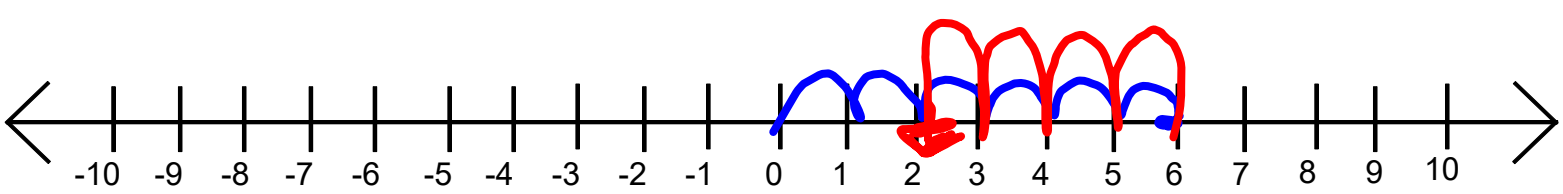
9 a) $(-1)+(+3) = +2$

Page 80

#9, 10, 12, 13, 14, 15, 16

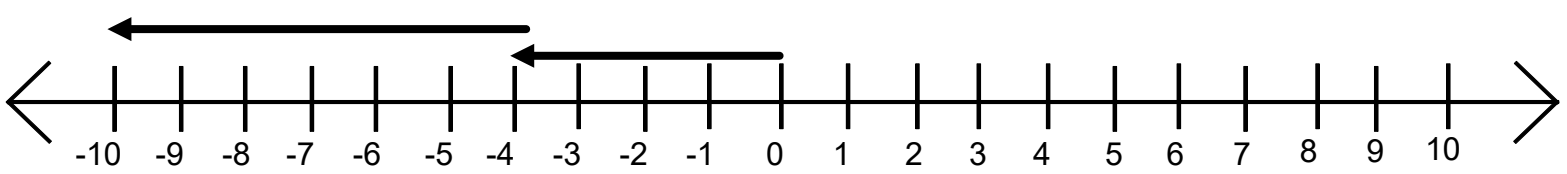


b) $(+6)+(-4)=+2$



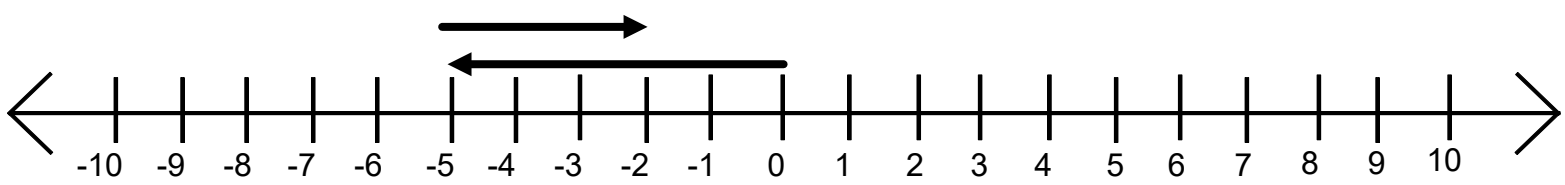
c) $(-4)-(+6)$

$(-4)+(-6) = -10$



d) $(-5)-(-3)$

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



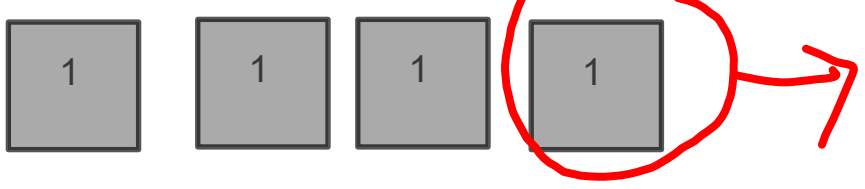
10. When you subtract 2 pos integers, you answer may be pos or neg.

$(+6)-(+4)=+2$ $(+4)-(+6)=-2$

11 - orally

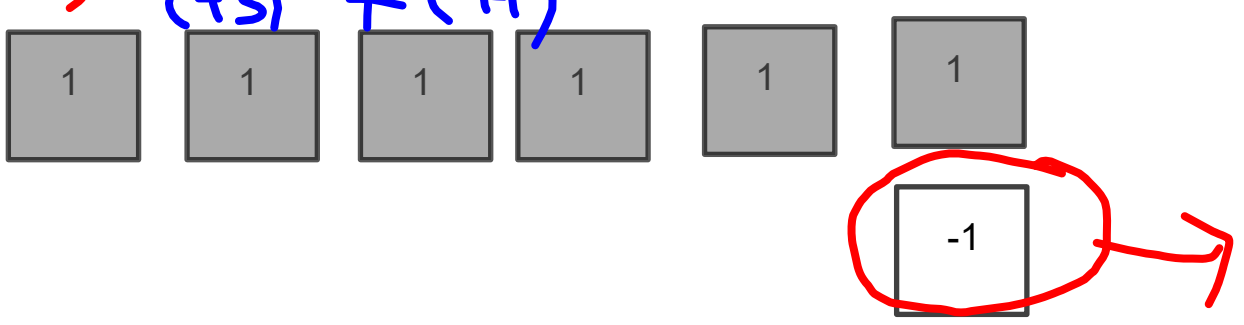
12. a) $(+4)-(+1)=+3$

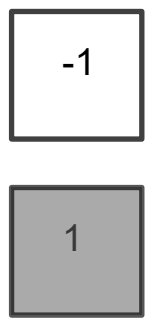
$(+4)+(-1)=+3$



b) $(+5)-(-1)=+6$

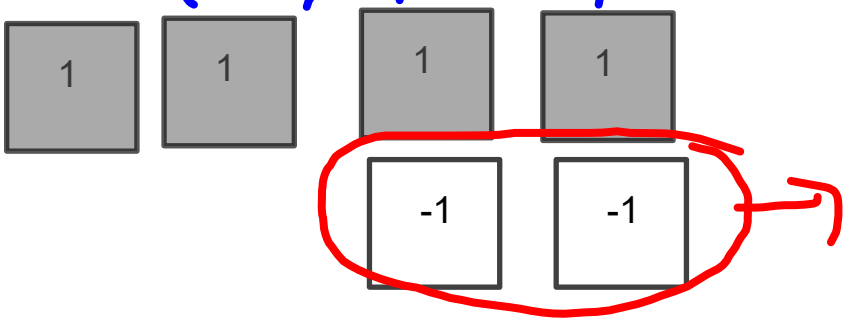
$(+5)+(+1)$





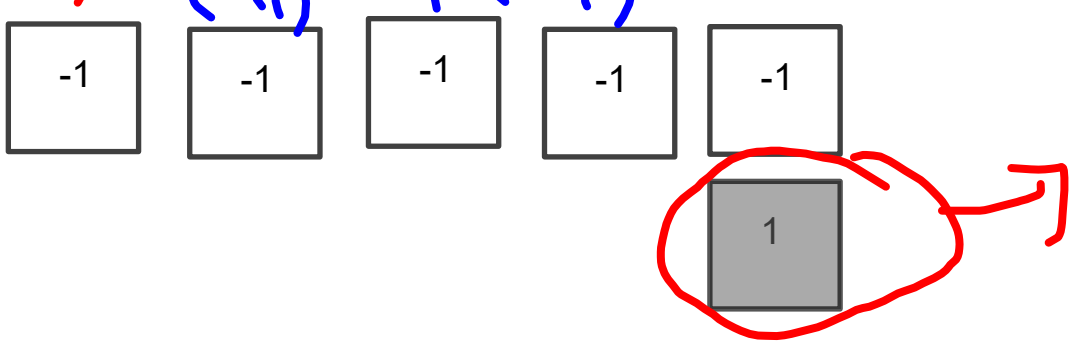
c) $(+2)-(-2)$

$(+2)+(+2)$

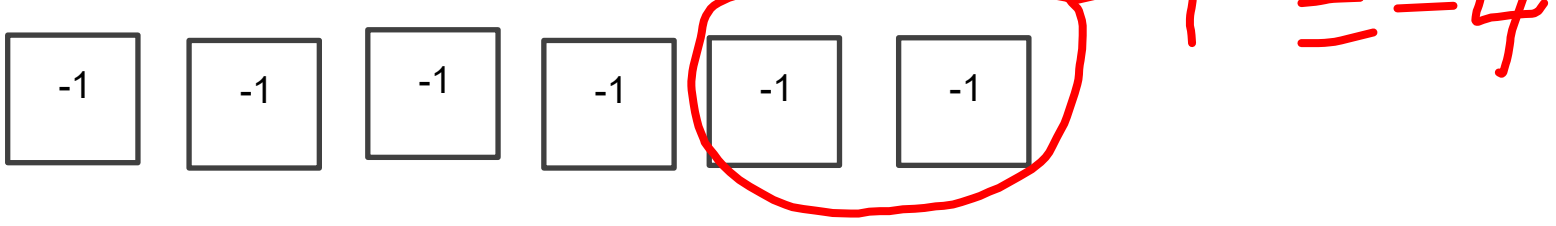


d) $(-4)-(+1)=-5$

$(-4)+(-1)$



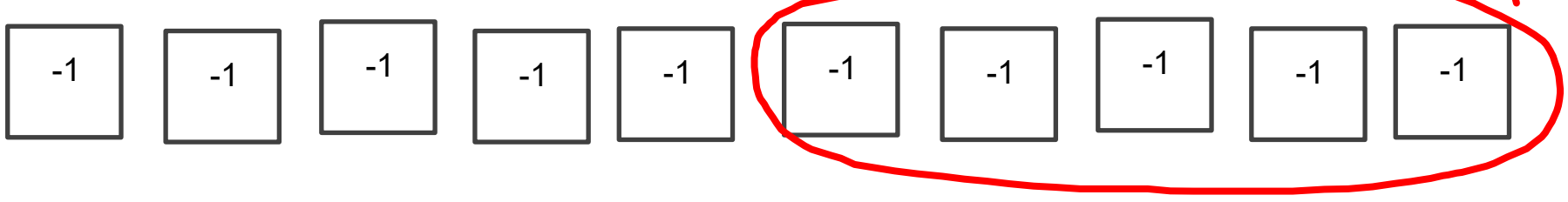
e) $(-6)-(-2)$



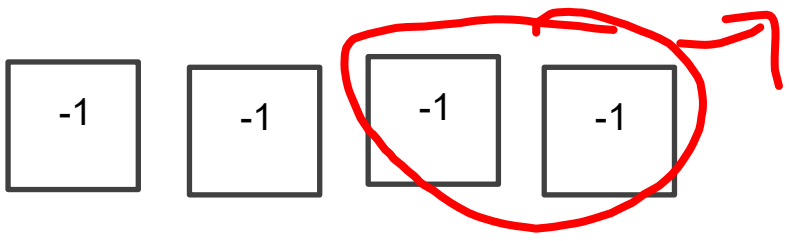
$=-4$

f) $(-10)-(-5)$

$=-5$



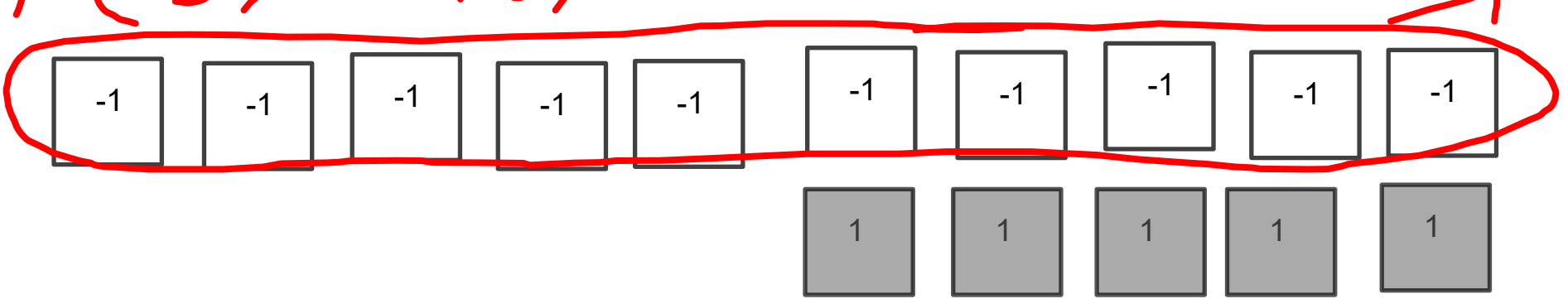
g) $(-4)-(-2)$



-2

h) $(-5)-(-10)$

$=+5$



13 a) $(+7)-(+2)=+5$

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

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

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

$(-4)+(+5)=+1$

d) $(+3)-(+3)=0$

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

$(+3)+(+3)=+6$

f) $(-3)-(-2)$

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

14) a) (+5) - (-7) =

(+5) + (+7) = +12

14) b) (-100) - (+50) =

(-100) + (-50) = -150

15) a) (-2) - (+7)

(-2) + (-7)

-9

9 in the difference

15) b) (+25) - (+11)

(+25) + (-11)

+14

16) a) (+9) - (-3)

(+9) + (+3)

+12

16) b) (-6) - (-5)

(-6) + (+5)

-1

1 in the difference

Page 80

#1) a) (+5) + (-8) = -3

b) (-3) - (+7)

c) (-9) + (-1)

d) (-4) + (+10)

e) (-6) - (-2)

f) (+12) - (-11)

#2)

a) (+9) +(-1)

B) (-4) - (+11)

C) (-8) + (-3)

D) (+13) - (+6)

E) (-7) + (+9)

F) (-1) - (-5)

#5) A) (-273) - (+100)

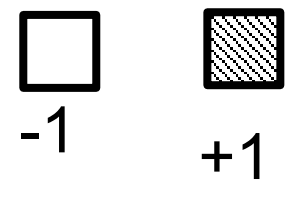
(-273) +(-100)

- 373

There is a difference of 373 degrees

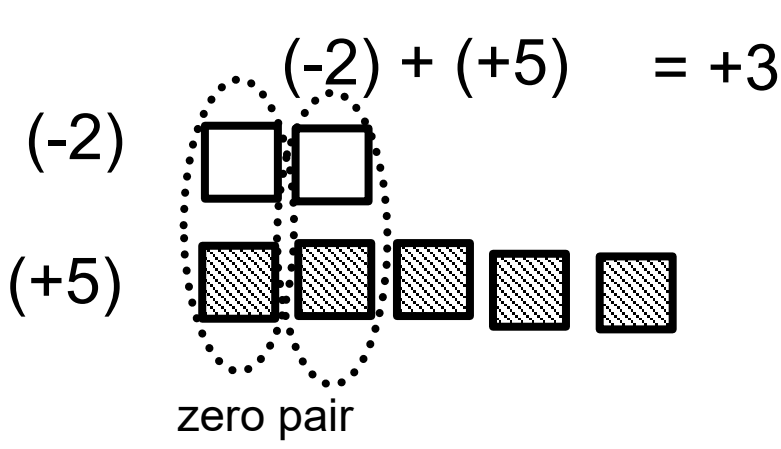
Grade 7 Test Review

Unit 2: Integers



Adding with tiles

-When you add integers you represent each integer in the addition statement. (Remove zero pairs and state answer)



Adding with Number lines

- Always start at zero

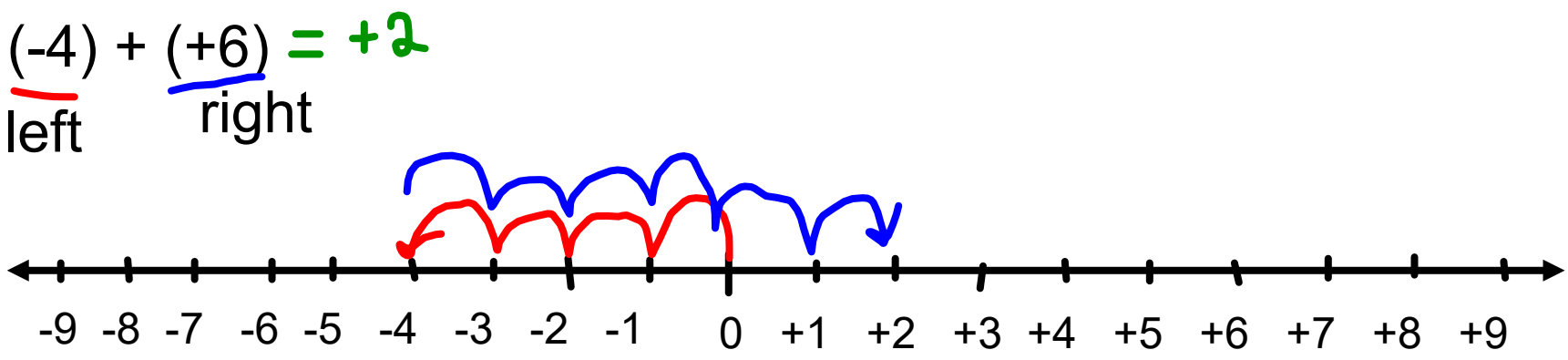
- Count the bumps in the road for the first integer

Move to the right ⇒ if positive

Move to the left ⇐ if negative

- When adding the second integer we count the bumps on the road in the direction given from where we ended with the first integer.

-Where you end up is the answer.



Adding with Rules

-When we add two integers with the same signs:

Ex) 1

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

both signs (-)

Thinking

3+7 = 10
both signs (-)

so answer is -10

Ex) 2

(+4) + (+8) = +12

both signs (+)

Thinking

4+8 = 12
So answer is +12

Both signs the same then just add both numbers together, ignoring the sign, and the answer has to have the same sign as the original integers

(+) + (-)

-When we add two integers with the **different signs**:

Step 1) Cover up the signs and ask yourself which number is larger.

The answer will have the sign of the bigger number

Step 2) Since they are different, ignore the sign and find the difference between the two numbers (Big minus small). That is your number for the answer

(-12) + (+3) = -9

Different signs

step 1) When you cover up the signs, we have 12 & 3.

12 is Larger so our answer will have the sign on 12 which is (-)

step 2) 12 - 3 = 9

Ex) (+2) + (-7) = -5

Different signs

Step 1) between 2 & 7 , 7 is bigger so the sign on 7 goes with the answer (-)

Step 2) 7-2 = 5

Which Number is larger? (Use <,>, =)

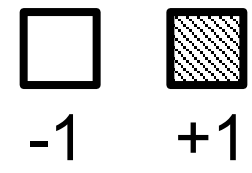
(-199) ☐ (-1)

Word problems

Represent the following as addition using integers

Bill owed his mom $15 and then borrowed another $5. What is his sum?

The temperature is 15°C at lunch then drops 4°. What is the new temperature?



Subtracting with tiles

- Always model the first integer

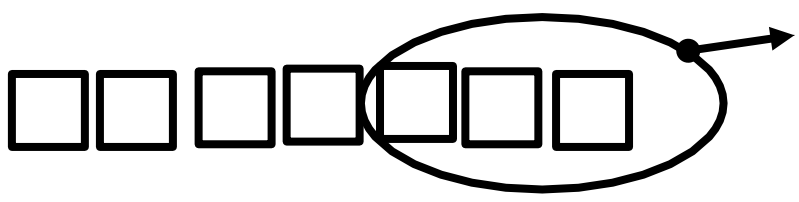
-Remove second integer

*if there are not enough to remove then add zero pairs of tiles and does not change the question

Ex1) (-7) - (-3)

Start with 7 negative tiles, then ask yourself if you can remove 3 negative titles. YES

To show removing, circle and point arrow away



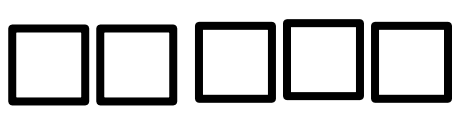
= -4

What is left over is the answer.

Ex2) (-5) - (+2)

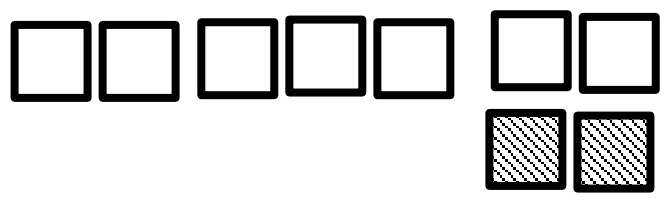
Step 1) Start with 5 negative tiles, then ask yourself if you can remove 2 positive titles. NO

To show removing, circle and point arrow away

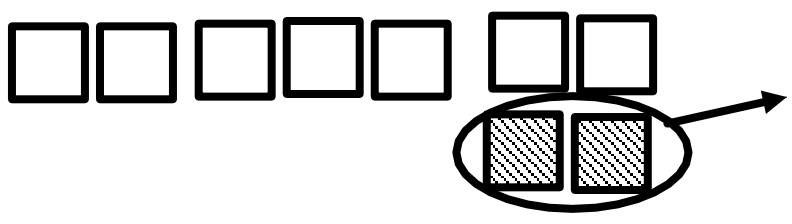


Step 2)

Need to add zero pairs (two positive and 2 negative)



Step 3) Now remove 2 positive tiles



= -7

Subtracting Rule

- Keep the sign on the first integer and "ADD the OPPOSITE"

Keep sign the same on the first integer
change the subtraction to addition and
change the sign on the second integer.
THEN USE ADDITION RULES

Ex 1) (+9) - (-5)

(+9) + (+5) ⟷ must show this step

now addition rule

(+9) + (+ 5) = +14

Test Tomorrow STUDY How?

Practice

Test Review Worksheet Sheet