

## Warm Up Grade 7

Date: \_\_\_\_\_

Use the subtraction rule to subtract each of the following:

a)  $(+10) - (-3)$   $\left\{ \begin{array}{l} (+10) + (+3) \\ = (+13) \end{array} \right.$       b)  $(-16) - (+5)$   $\left\{ \begin{array}{l} (-16) + (-5) \\ = (-21) \end{array} \right.$       c)  $(+9) - (+3)$   $\left\{ \begin{array}{l} (+9) + (-3) \\ = (+6) \end{array} \right.$       d)  $(-4) - (-7)$   $\left\{ \begin{array}{l} (-4) + (+7) \\ = (+3) \end{array} \right.$

2) Model  $(-4) - (-6)$  with tiles

= Remodel answer  
= ••

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

$$\text{7 a) (i) } (+3) - (+1) = +2$$

$$\begin{aligned} (+1) - (+3) \\ (+1) + (-3) = -2 \end{aligned}$$

$$\begin{aligned} \text{(ii) } (-3) - (-2) \\ (-3) + (+2) = -1 \end{aligned}$$

$$\begin{aligned} (-2) - (-3) \\ (-2) + (+3) = +1 \end{aligned}$$

$$\begin{aligned} \text{(ii) } (+4) - (-3) \\ (+4) + (+3) = +7 \end{aligned}$$

$$\begin{aligned} (-3) - (+4) \\ (-3) + (-4) = -7 \end{aligned}$$

7 (b) The order in which you subtract integers is important

$(+3) - (+1)$  is not the same as  $(+1) - (+3)$

9. Subtraction question with answer:

$$\text{a) } +2$$

$$(+4) - (+2)$$

$$(+10) - (+8)$$

$$\text{b) } (-3)$$

$$(-5) - (-2)$$

$$(-8) - (-5)$$

$$(-1) - (+2)$$

$$\text{c) } +5$$

$$(+12) - (+7)$$

$$(+9) - (+4)$$

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

$$\text{d) } -6$$

$$(-8) - (-2)$$

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

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

10 a)  $(+3) - (-1)$



$(+3) + (+1)$

$+4$

Greater

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

Homework Solutions

b)  $(-4) - (-5)$



$(-4) + (+5)$

$+1$

Greater

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

12 a)  $(+4) - \square = +3$

$+1$

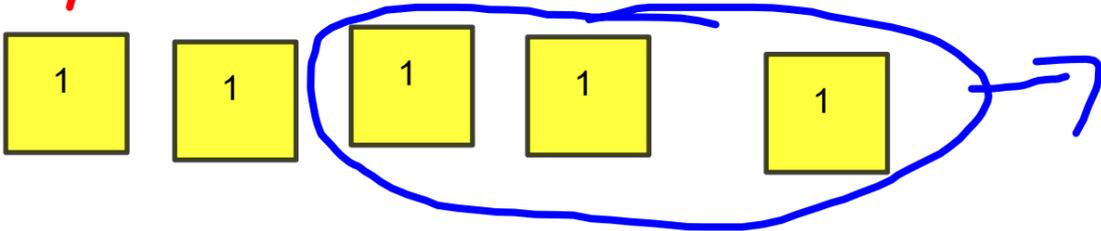
b)  $(+3) - \square = -1$

$+4$

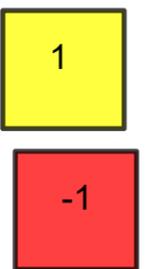
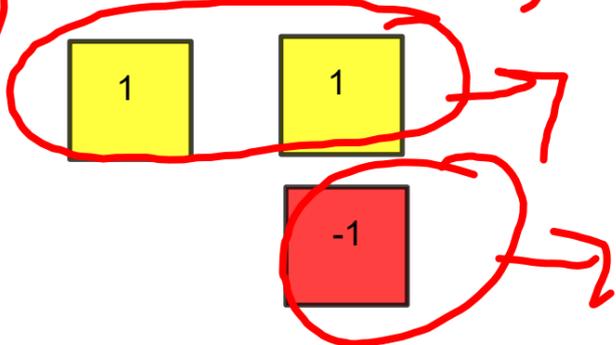
c)  $\square - (+1) = +4$

$+5$

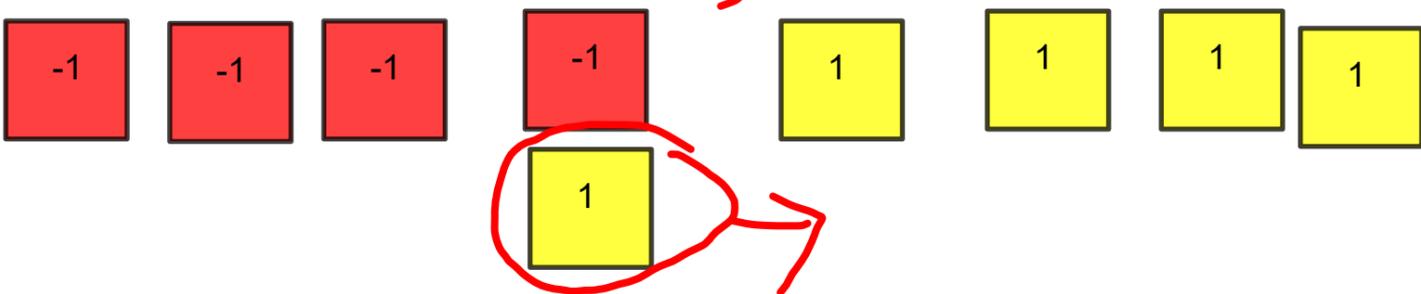
13 a)  $(+4) + (+1) - (+3) = +2$



b)  $(+1) - (+2) - (-1) = 0$



c)  $(-3) - (+1) + (+4) = 0$



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

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

f)  $(+1) - (+2) + (+1)$   
 $(+1) + (-2) + (+1) = 0$

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pg. 69 # 7,9,10,12,13

## Homework Solutions

$$\begin{aligned} 13a) \quad & (+4) + (+1) - (+3) \\ & (+4) + (+1) + (-3) = +2 \end{aligned}$$

$$\begin{aligned} b) \quad & (+1) - (+2) - (-1) \\ & (+1) + (-2) + (+1) = 0 \end{aligned}$$

$$\begin{aligned} c) \quad & (-3) - (+1) + (+4) \\ & (-3) + (-1) + (+4) = 0 \end{aligned}$$

$$\begin{aligned} d) \quad & (-2) - (-4) + (-1) \\ & (-2) + (+4) + (-1) = +1 \end{aligned}$$

$$\begin{aligned} e) \quad & (+2) - (+1) - (+4) \\ & (+2) - (+1) + (-4) = -3 \end{aligned}$$

$$\begin{aligned} f) \quad & (+1) - (+2) + (+1) \\ & (+1) + (-2) + (+1) = 0 \end{aligned}$$

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$$\text{1 a) } (+2) - (+1) = +1$$

$(+2) \quad \downarrow \quad + \quad (-1)$

$$\text{c) } (-4) - (-1)$$
$$(-4) + (+1) = -3$$

$$\text{e) } (-2) - (-6)$$
$$(-2) + (+6) = +4$$

$$\text{2 a) } (+1) - (+2)$$
$$(+1) + (-2) = -1$$

$$\text{c) } (-1) - (-4)$$
$$(-1) + (+4) = +3$$

$$\text{e) } (-6) - (-2)$$
$$(-6) + (+2) = -4$$

### Homework Solutions

$$\text{b) } (+4) - (-3)$$
$$(+4) + (+3) = +7$$

$$\text{d) } (-5) - (+2)$$
$$(-5) + (-2) = -7$$

$$\text{f) } (-3) - (-7)$$
$$(-3) + (+7) = +4$$

$$\text{b) } (-3) - (+4)$$
$$(-3) + (-4) = -7$$

$$\text{d) } (+2) - (-5)$$
$$(+2) + (+5) = +7$$

$$\text{f) } (-7) - (-3)$$
$$(-7) + (+3) = -4$$

$$3a) (+10) - (+5) = +5$$

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

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

$$c) (-8) - (+6) = -14$$

$$(-8) + (-6) = -14$$

$$d) (-10) - (+5) = -15$$

$$(-10) + (-5) = -15$$

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

$$(-4) + (-4) = -8$$

$$f) (-4) - (-4) = 0$$

$$(-4) + (+4) = 0$$

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

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

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

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

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

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

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

$$e) (+1) - (+1) = 0$$

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

$$(+1) + (+1) = +2$$

## Use the rules for Adding and Subtracting to answer

Show all Work (Especially for subtraction)

$$1) (-15) + (-7) = \underline{(-22)}$$

↑ same

$$2) (+16) + (-8) = \underline{(+8)}$$

↓ diff

$$3) (-1) + (+7) = \underline{(+6)}$$

↓ opp  
 $(-1) + (-7)$   
↑ same

$$4) (+17) + (-21) = \underline{(-4)}$$

↓ diff

$$5) (-25) + (-14) = \underline{(-39)}$$

↑ same

Show work

$$6) (-14) + (-2) - (+15) = \underline{\quad}$$

$(-16) - (+15)$   
 $(-16) + (-15) = \underline{-31}$

$$7) (+2) - (+6) + (-3) = \underline{\quad}$$

$(+2) + (-6) + (-3)$   
 $(-4) + (-3)$   
 $\underline{-7}$

8) Write an addition statement and the final sum for the situation.

a) What is the final temperature if the temperature was  $18^{\circ}\text{C}$  and rose 3 degrees?  $(+18) + (+3) = (+21)$

b) The populations of Mathville was 2100 and then dropped by 80 people, what is the new population?  $(+2100) + (-80) = (+2020)$

9) If you have 6 shaded tiles, how many unshaded tiles are required to model -3.  $(+6) + (? ) = (-3)$

$\underline{-9}$

Class/Homework

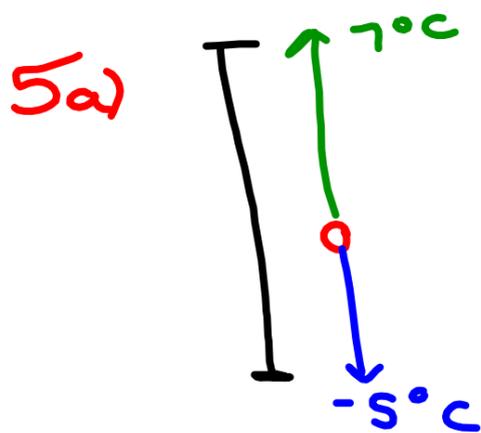
Test \_\_\_\_\_

## Start of Review TODAY

Finish from yesterday Page 73-74 #1, 3

Then  
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#4, #5, #8(a,b), #11(a,b), #12(a,b,c,d,e,f)



Test in 5 days time

STUDY RULES

$$(7^{\circ}\text{C}) - (-5^{\circ}\text{C}) =$$
$$(7^{\circ}) \downarrow + (5^{\circ}\text{C}) = (12^{\circ}\text{C})$$

Test Tuesday, Sept. 23

Day 2 of Review

Class/Homework Thursday

pg. 79  
# 1(a,c),  
#2(a,b,c,d,e),  
#3(a,b,c,d),  
#4(a,b,c,d) ,  
#5(a,b),  
#6,  
#7(a,b),  
#8(a,b,c,d)

**NEED TO DO  
DIVISIBILITY**

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$$5a) (+7) - (-5) \\ (+7) + (+5) = +12$$

$$b) (-15) - (-8) \\ (-15) + (+8) = -7$$

$$c) (-4) - (+9) \\ (-4) + (-9) = -13$$

$$6a) (+2) - (-6) \\ (+2) + (+6) = +8$$

means 8  
more shots

$$b) (-3) - (-8) \\ (-3) + (+8) = +5$$

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

means 9 fewer  
shots.

7a) Calgary

$$(+13) - (-4) \\ (+13) + (+4) = +17$$

17° warmer

Iqaluit

$$(-10) - (-22) \\ (-10) + (+22) = +12$$

Toronto

$$(+12) - (-3) \\ (+12) + (+3) = +15$$

Victoria

$$(+13) - (+7) = +6$$

b) Calgary had the greatest difference in temp.

$$8. (-6) - (+11)$$
$$(-6) + (-11) = -17$$

$$(+11) - (-6)$$
$$(+11) + (+6) = +17$$

The answers are opposite integers.

9. +4 as a difference of 2 integers

$$(+8) - (+4) \quad (+6) - (+2)$$

$$(-1) - (-5) \quad (0) - (-4)$$

$$(-4) - (-8) \quad (-10) - (-14)$$

$$10. a) (+6) - (+5) = +1$$
$$(+5) - (+5) = 0$$
$$(+4) - (+5) = -1$$
$$(+3) - (+5) = -2$$
$$(+2) - (+5) = -3$$

$$b) (+7) - (+4) = +3$$
$$(+7) - (+3) = +4$$
$$(+7) - (+2) = +5$$
$$(+7) - (+1) = +6$$
$$(+7) - (0) = +7$$
$$(+7) - (-1) = +8$$
$$(+7) - (-2) = +9$$
$$(+7) - (-3) = +10$$

$$11. a) +6, +2, -2, \underline{-6}, \underline{-10}, \underline{-14}, \underline{-18}$$

subtract +4,

$$b) -3, -1, +1, \underline{+3}, \underline{+5}, \underline{+7}, \underline{+9}$$

add +2 each time

$$c) +5, +12, +19, \underline{+26}, \underline{+33}, \underline{+40}, \underline{+47}$$

add 7 each time

$$d) +1, 0, -1, \underline{-2}, \underline{-3}, \underline{-4}, \underline{-5}$$

subtract 1

$$12 a) (+4) - (+2) - (+1) = +1$$

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

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

$$c) (-1) + (-2) - (+1)$$

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

$$d) (+5) - (+1) + (-2) = +2$$

$$e) (+10) - (+3) - (-5)$$

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

$$f) (-7) - (+1) + (-3)$$

$$(-7) + (-1) + (-3) = -11$$