

Warm Up Grade 7

Date: Sept. 27

Test Tuesday



Use the subtraction rule to subtract each of the following:

a) $(+10) - (-3)$	b) $(-16) - (+5)$	c) $(+9) - (+3)$	d) $(-4) - (-7)$
\downarrow add \downarrow opp	\downarrow same \downarrow opp	\downarrow opp \downarrow opp	\downarrow opp \downarrow opp
$= (+10) + (+3)$	$= (-16) + (-5)$	$= (+9) + (-3)$	$= (-4) + (+7)$
$= (+13)$	$= (-21)$	$= (+6)$	$= (+3)$

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

Homework Solutions

7 a) (i) $(+3) - (+1) = +2$
 $(+3) + (-1) = +2$

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

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

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

(iii) $(+4) - (-3)$
 $(+4) + (+3) = +7$

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

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:

a) $+2$ $(+4) - (+2)$ $(+10) - (+8)$

b) (-3) $(-5) - (-2)$ $(-8) - (-5)$
 $(-1) - (+2)$

c) $+5$ $(+12) - (+7)$ $(+9) - (+4)$
 $(+4) - (-1)$

d) -6 $(-8) - (-2)$ $(-5) - (+1)$
 $(-3) - (+3)$

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

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

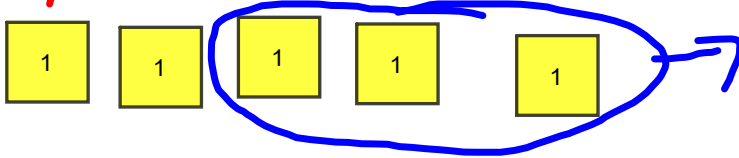
b) $(+3) - \square = -1$
 $+4$

c) $\square - (+1) = +4$
 $+5$

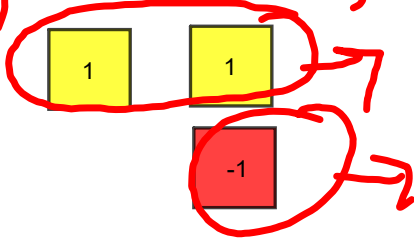
pg. 69 # 7,9,10,12

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

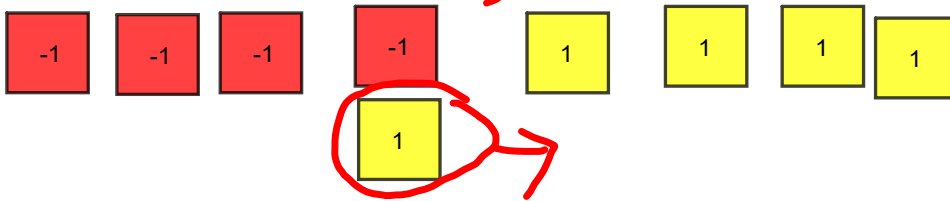
Homework Solutions



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

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

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

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

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

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

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

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$$1 \ a) (+2) - (+1) = +1$$

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

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

$$2 \ a) (+1) - (+2) \\ (+1) + (-2) = -1$$

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

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

Homework Solutions

$$b) (+4) - (-3) \\ (+4) + (+3) = +7$$

$$d) (-5) - (+2) \\ (-5) + (-2) = -7$$

$$f) (-3) - (-7) \\ (-3) + (+7) = +4$$

$$b) (-3) - (-4) \\ (-3) + (-4) = -7$$

$$d) (+2) - (-5) \\ (+2) + (+5) = +7$$

$$f) (-7) - (-3) \\ (-7) + (+3) = -4$$

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

$$b) (+7) - (-3) \text{ Homework Solutions}$$

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

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

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

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

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

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

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

$$f) (-4) - (-4)$$

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

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

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

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

$$c) (-2) - (-3)$$

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

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

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

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

$$f) (+1) - (-1)$$

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

Use the rules for Adding and Subtracting to answer
 Show all Work (Especially for subtraction)

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

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

3) $(-1) - (+7) = \underline{-8}$
 $(-1) + (-7)$

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

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

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

$(-16) - (+15)$
 $(-16) + (-15)$

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

$(-4) + (-3)$

$(-4) + (-3)$

$= \underline{-7}$

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

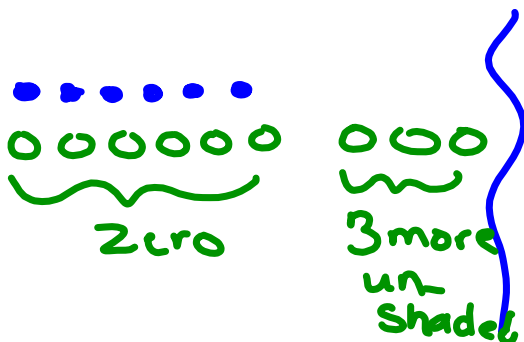
a) What is the final temperature if the temperature was 18°C and rose 3 degrees?

$(+18) + (+3) = (+21)$ The final temperature is $(+21)^{\circ}\text{C}$

b) The populations of Mathville was 2100 and then dropped by 80 people, what is the new population?

$(+2100) + (-80) = (+2020)$ The new population is $(+2020)$.

9) If you have 6 shaded tiles, how many unshaded tiles are required to model -3.



$(+6) + \boxed{-9} = (-3)$

→ 6 unshaded @ zero

→ 3 more unshaded

Class/Homework

Test Oct. 4

Start of Review TODAY

Adding
→ same or diff

Finish from yesterday Page 73-74 #1, 2, 3

Then
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Sub
→ Add opp
then use add rules

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

Quiz Tomorrow on Adding & Subtracting of Integers

(Rules and Models)

STUDY RULES

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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Homework Solutions

$$5a) (+7) - (-5)$$

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

$$b) (-15) - (-8)$$

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

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

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

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

$$(+2) + (+6) = +8$$

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

$$\text{Iqaluit } (-10) - (-22)$$

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

Toronto

$$(+12) - (-3)$$

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

$$\text{Victoria } (+13) - (+7) = +6$$

b) Calgary had the greatest
difference in temp.

$$8. \begin{array}{l} (-6) - (+11) \\ (-6) + (-11) = -17 \end{array}$$

$$\begin{array}{l} (+11) - (-6) \\ (+11) + (+6) = +17 \end{array}$$

The answers are opposite integers.

9. +4 as a difference of 2 integers

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

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

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

$$10 \text{ a) } \begin{array}{l} (+6) - (+5) = +1 \\ (+5) - (+5) = 0 \\ (+4) - (+5) = -1 \\ (+3) - (+5) = -2 \\ (+2) - (+5) = -3 \end{array}$$

$$b) \begin{array}{l} (+7) - (+4) = +3 \\ (+7) - (+3) = +4 \\ (+7) - (+2) = +5 \\ (+7) - (+1) = +6 \\ (+7) - (0) = +7 \\ (+7) - (-1) = +8 \\ (+7) - (-2) = +9 \\ (+7) - (-3) = +10 \end{array}$$

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

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

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

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

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

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

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

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

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

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

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

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

Homework Sheet 4.3 # 1-25

Sheet 4.4 # 1-34

Sheet 4.5 #1-16

(Even numbers only)