

Integer unit review

For questions 1, 2 & 3 use a zero pairs diagram. Write the correct answer and circle it.

1. $(+8) + (+4)$ = (12)

$$\begin{array}{cccccccc} + & + & + & + & + & + & + & + \\ + & + & + & + & & & & \end{array}$$

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

$$\begin{array}{ccccccc} \ominus & \ominus & - & - & - & - & - \\ \oplus & \oplus & & & & & \end{array}$$

3. $(+3) + (-9) + (+6) + (-5)$ = (-5)

$$\begin{array}{ccccccccccc} \oplus & \oplus & \oplus & \ominus & \ominus & \ominus & \ominus & \ominus & \ominus & \oplus & \oplus & \oplus \\ \ominus & \ominus & \ominus & \oplus & \oplus & \oplus & \oplus & \oplus & \oplus & & & \end{array}$$

4. Complete the equation $(6) + (-10) + \square = (-12)$.

$$-4 + \square = -12$$

$$= (-8)$$

4. Predict whether $(+912) + (-782)$ will be positive or negative. Why?

It will be positive because 912 (the positive number), is greater than the negative number (782)

5. Calculate $(+23) + (-17)$.

$(+6)$

6. Calculate $(-48) + (+12)$.

(-36)

7. Calculate $(+8) + (-13) + (-36)$.

$-5 + -36 = (-41)$

8. Calculate $(-324) + (45) + (-167)$.

(-446)

9. On Monday morning, Susanne had \$40 in her wallet. How much did Susanne put into, or take out of, her wallet on Friday? Explain.

Day	start	Mon.	Tue.	Wed.	Thu.	Fri.
Gain/loss (\$)		+5	-12	+24	+17	-15
Total (\$)	40	45	33	57	74	59

she took out \$15⁰⁰ on Friday

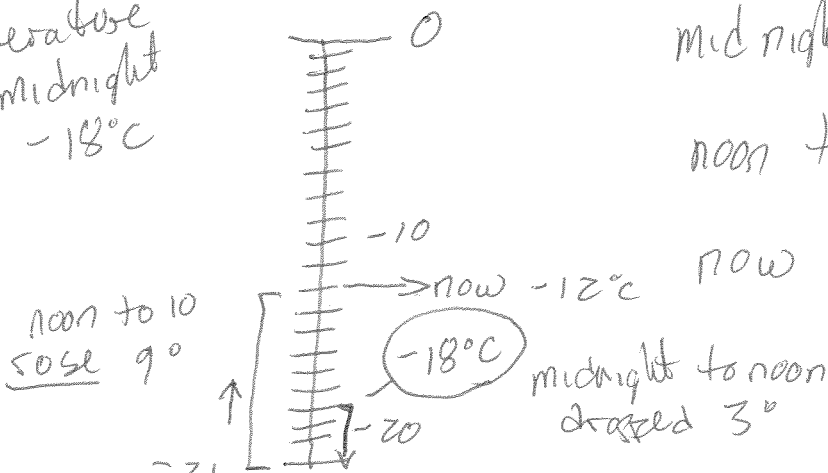
10. For exercise, Ana walks up and down a staircase. She starts on the sixth step and walks as follows: up 3 steps, down 4 steps, up 2 steps, down 3 steps. On what step does she finish?

$$6 + 3 - 4 + 2 - 3 = 4$$

she finishes on the 4th step.

11. The temperature dropped 3 degrees from midnight to noon. Then it rose 9 degrees from noon to 10:00 P.M. It is now -12°C . What was the temperature at midnight? Explain.

Temperature at midnight was -18°C



midnight to noon - dropped 3° (-3)

noon to 10 pm rose 9° ($+9$)

now -12°C

midnight to noon dropped 3°

Name: _____

Inclass Assignment #2: Subtracting Integers

For questions 1-5 use a zero pairs diagram. Write the correct answer and circle it.

1. $(-8) - (4)$.



2. $(-6) - (2)$.



3. $(3) - (-9)$



4. $(4) - (-7)$



5. $(-6) - (4)$



For questions 6-10, rewrite the question using KFC and solve.

Keep, Flip, Change

6. $(-14) - (-4)$

$$(-14) + 4 = \textcircled{-10}$$

7. $(-13) - (-8)$

$$(-13) + 8 = \textcircled{-5}$$

8. $(3) - (-9)$

$$(3) + (9) = \textcircled{12}$$

9. $(42) - (-8)$

$$42 + 8 = \textcircled{50}$$

10. $(-26) - (-7)$

$$(-26) + 7 = \textcircled{-19}$$

11. Josh had borrowed money from some classmates. He borrowed \$5 from Libby, \$3 from Anthony, \$10 from Astrid, \$2 from Devlyn and \$6 from Dawson. J looked in his wallet and had only \$7. How much more money does he need to pay all of his classmates back?

$$5 + 3 + 10 + 2 + 6 = \$26 \text{ borrowed}$$

$$7 + (-26) = -19$$

He needs to payback \$19 total

12. Metal mercury at room temperature is a liquid. Its melting point is -39°C . The freezing point of alcohol is -114°C . How much warmer is the melting point of mercury than the freezing point of alcohol?

Find the difference between -114 and -39

$$(-114) - (-39) =$$

$$(-114) + 39 = 75$$

the melting point^{of mercury} is 75°C warmer than the freezing point of alcohol

13. A monkey sits on a limb that is 15 m above the ground. He swings up 4m, and climbs up 2 more meters. Then then swings down 4m then swings down 6 more m. His final movement is a swing up of 3 m. How far off the ground is the monkey now?

$$15 + 4 + 2 - 4 - 6 + 3 = 14$$

the monkey is 14 m off the ground.

Integer Math Squares # 5

1.

-5	-2
-3	17

7

2.

-8	-6
18	-2

2

3.

-9	10
-7	14

8

4.

-12	10
-3	9

4

5.

-3	-9
-27	-31

-70

6.

-36	17
-17	-3

-39

7.

-51	-49
26	74

0

8.

-3	-7
-8	2

-16

9.

-3	-4
-2	-6

-15

Integer Math Squares # 6

1.

-5	-4
-14	-11

-34

2.

4	23
-4	-13

10

3.

6	3
1	-12

-2

4.

-24	-36
12	18

-30

5.

-21	-21
-21	-21

-84

6.

-6	-14
4	-19

-35

7.

-20	6
7	5

-2

8.

-5	4
8	-4

3

9.

-4	-5
-1	9

-1

Solve the following.

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

- a) -2
- b) +2**
- c) +8
- d) -8

2) $(+4) - (+5) = ?$

- a) -9
- b) +9
- c) +1
- d) -1**

3) $(-6) + (-15) = ?$

- a) -31
- b) -9
- c) +9
- d) -21**

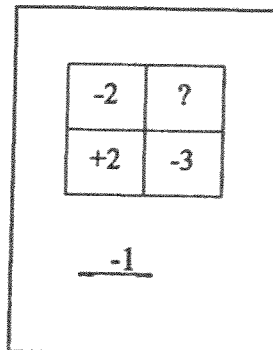
4) $(+22) + (-11) + (-3) + (-1) + (+16) = ?$

- a) -23
- b) +23**
- c) +6
- d) -25

5) Solve the integer square. Remember that all four integers in the square must add up to the number on the blank under the square!

The missing number should be:

- a) -2
- b) +2**
- c) +1
- d) -3



6) The Bay of Fundy has tides that are some of the largest in the world. Fisherman in the area mark high tide with a pole that shows the water at a height. First thing in the morning the pole shows a water height of 10 meters. After 6 hours, the tide goes out and the water drops 14 meters. According to the fisherman's measuring pole the height of the water would be at what level at this time?

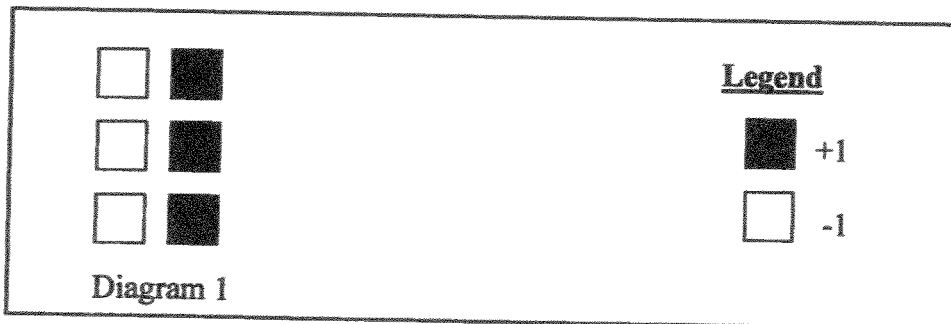
- a) -24 m
- b) -4 m
- c) 4 m
- d) 24 m

7) The average monthly high temperatures and precipitation are given below for five cities. Arrange the temperatures of the five cities from highest to lowest (descending order).

City	Temperature	Precipitation
Brunei	25° C	533 mm
Banda	26° C	525 mm
Nanisivik	-25° C	200 mm
Niigata	4.9° C	127 mm
Madagascar	23.8° C	326 mm

- a) Nanisivik, Banda, Brunei, Niigata, Madagascar
- b) Nanisivik, Niigata, Madagascar, Brunei, Banda
- c) Banda, Brunei, Madagascar, Niigata, Nanisivik
- d) Banda, Madagascar, Brunei, Niigata, Nanisivik

8) The diagram below represents what value?



- a) -6
- b) -3
- c) 0
- d) +3