

- 1)  $10 + 96$   $106$
- 2)  $74 - 10$   $64$
- 3)  $\frac{1}{2}$  of 22  $11$
- 4)  $11\ 000 \div 100$   $110$
- 5)  $65 \div 5$   $13$
- 6)  $67 \times 10$   $670$  !!
- 7)  $17 \times 2$   $34$
- 8)  $12 \times 25$   $300$
- 9) What number is divisible by 6? a) 86 b) 122 c) 114
- 10)  $175 \div 25$   $7$   $114$

8	1	6
3	5	7
4	9	2



8	1	6
3	5	7
4	9	2

2. Use a number line to add.

a)  $(+4) + (+2) = +6$    b)  $(+5) + (-3) = +2$    c)  $(-4) + (-2) = -6$    d)  $(-8) + (+2) = -6$   
e)  $(-6) + (-7) = -13$    f)  $(+1) + (-6) = -5$    g)  $(-5) + (+2) = -3$    h)  $(+8) + (+4) = +12$

3. a) Reverse the order of the integers in question 2, then add.

b) Compare your answers to the answers in question 2.

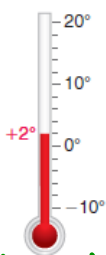
What do you notice? *They are the same sum.*

c) Make a general statement about your observations.

*The sum remains the same no matter the order of the integers.*

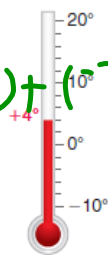
4. Look at these thermometers. Find each temperature after:

a) it falls 4°C



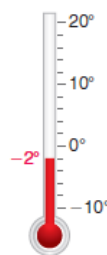
$$(+2) + (-4) = -2$$

b) it falls 7°C



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

c) it rises 6°C



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

5. a) The temperature rises 7°C, then drops 2°C.

What is the overall change in temperature?

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

b) Adrian loses \$4, then earns \$8.

Did Adrian gain or lose overall?

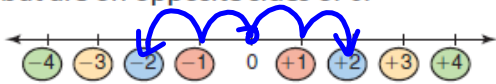
$$(-4) + (+8) = +4$$

c) The value of a stock went up \$3, then down \$2.

What was the final change in the value of the stock?

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

6. Opposite integers are the same distance from 0 but are on opposite sides of 0.



- a) Write the opposite of each integer.

i)  $+(-2) = 0$  ii)  $(-5) + 5 = 0$  iii)  $(+6) + (-6) = 0$  iv)  $(-8) + 8 = 0$

- b) Add each integer to its opposite in part a.

- c) What do you notice about the sum of two

opposite integers?

They are sums of zero.  
Zero pairs 😊

7. Use a number line. For each sentence below:

- a) Write each number as an integer.
- b) Write the addition equation.

Explain your answer in words.

i) You take 5 steps backward, then 10 steps backward.  $(-5) + (-10) = -15$

ii) You withdraw \$5, then deposit \$8.  $(-5) + (+8) = +3$

iii) A deep sea diver descends 8 m, then ascends 6 m.  $(-8) + (+6) = -2$

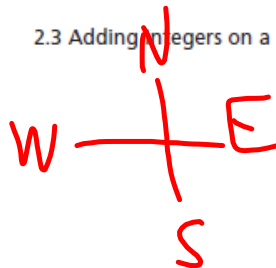
iv) A person drives a snowmobile 4 km east, then 7 km west.

v) A person gains 6 kg, then loses 10 kg.  $(+6) + (-10) = -4$



+                      -

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



**LESSON**

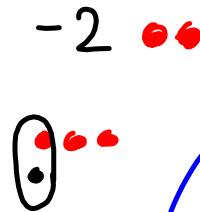
**2.1** 1. Use coloured tiles to model each integer in two different ways. Draw the tiles.

a) -5	b) 0
c) +8	d) -1
e) +3	f) -7

2. Suppose you have 8 red tiles. How many yellow tiles would you need to model +3? How do you know?

**2.2** 3. What sum does each set of tiles model? How do you know you are correct? Write the addition equations.

a) 6 yellow tiles and 1 red tile
b) 5 yellow tiles and 7 red tiles
c) 4 yellow tiles and 4 red tiles



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9. 1, 2, 3,

7a, b 7a, b 8a, b

- 2.3** **5.** Use a number line to add.  
Write the addition equations.
- a)  $(+3) + (+2)$     b)  $(-5) + (-1)$   
c)  $(-10) + (+8)$     d)  $(+6) + (-5)$   
e)  $(-8) + (+8)$     f)  $(-5) + (+12)$

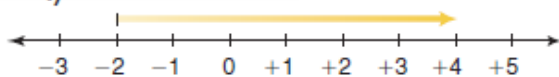
- 6.** a) Add.  $(+4) + (-5)$   
b) Find 4 different pairs of integers that have the same sum as part a.

- 7.** Write an addition equation for each situation.
- a) Puja earned \$50, and spent \$20. How much did Puja then have?  
b) The temperature is  $5^{\circ}\text{C}$ , then drops  $10^{\circ}\text{C}$ . What is the final temperature?  
c) The population of a city was 124 000, then it dropped by 4000 people. What was the population then?  
d) A plane was cruising at an altitude of 12 000 m, then dropped 1200 m. What was the cruising altitude then?

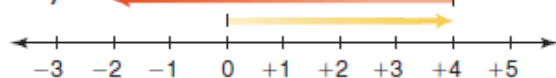


8. a) Write the addition equation modelled by each number line.  
b) Describe a situation that each number line could represent.

i)



ii)



Let's review what we know....

about Integers