

October 12, 2016

1) $(-9) + (-7)$ 16

2) $90 - 12$ 78

3) $\frac{1}{2}$ Of 44 22

4) $8\,000 \div 1\,000$ 8

5) $72 \div 9$ 8

6) 18×0.5 9

7) 212×2 424

8) What number is divisible by 3? a) 102 b) 104 c) 92 102

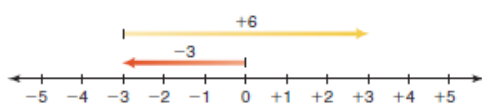
9) What number is divisible by 4? a) 1002 b) 938 c) 1721 938

10) $\frac{1}{3}$ of 15 5

- To subtract an integer, we add the opposite integer.

For example, to subtract: $(-3) - (-6)$

Add the opposite: $(-3) + (+6)$



So, $(-3) - (-6) = +3$

The opposite of
-6 is +6.



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

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

Practice

1. Use a number line to subtract.

Use coloured tiles to check your answers.

- a) $(+2) - (+1)$ b) $(+4) - (-3)$ c) $(-4) - (-1)$
d) $(-5) - (+2)$ e) $(-2) - (-6)$ f) $(-3) - (-7)$

2.5 Subtracting Integers on a Number Line 73



2. a) Reverse the order of the integers in question 1, then subtract.
b) How are the answers different from those in question 1? Explain.

1. Use a number line to subtract.

Use coloured tiles to check your answers.

- | | | |
|------------------|------------------|------------------|
| a) $(+2) - (+1)$ | b) $(+4) - (-3)$ | c) $(-4) - (-1)$ |
| d) $(-5) - (+2)$ | e) $(-2) - (-6)$ | f) $(-3) - (-7)$ |

3. Use a number line to subtract. Write the subtraction equations.

- a) $(+10) - (+5)$ b) $(+7) - (-3)$ c) $(-8) - (+6)$
d) $(-10) - (+5)$ e) $(-4) - (+4)$ f) $(-4) - (-4)$

4. Rewrite using addition to find each difference.

- a) $(+6) - (+4)$ b) $(-5) - (+4)$ c) $(-2) - (-3)$
d) $(+4) - (-2)$ e) $(+1) - (+1)$ f) $(+1) - (-1)$



a)

5. What is the difference in temperatures?

How can you subtract to find out?

- a) A temperature 7°C above zero and a temperature 5°C below zero
- b) A temperature 15°C below zero and a temperature 8°C below zero
- c) A temperature 4°C below zero and a temperature 9°C above zero

7. a) The table shows the average afternoon temperatures in January and April for four Canadian cities.
What is the rise in temperature from January to April for each city? Show your work.
- b) Which city has the greatest difference in temperatures?
How do you know?

	City	January Temperature	April Temperature
i)	Calgary	-4°C	$+13^{\circ}\text{C}$
ii)	Iqaluit	-22°C	-10°C
iii)	Toronto	-3°C	$+12^{\circ}\text{C}$
iv)	Victoria	$+7^{\circ}\text{C}$	$+13^{\circ}\text{C}$



9. Show three ways that +4 can be written as the difference of two integers.

Add the opposite!

(+19)

+2) (2)

(+2) + (+2) = +4

(+1) - (-3)

(+1) + (+3) = +4

1.

p. 74

derp

4, 5, 7, 9, 11

Don't touch the integer!

#11 = # line

p. 74 finish #3 ☺

