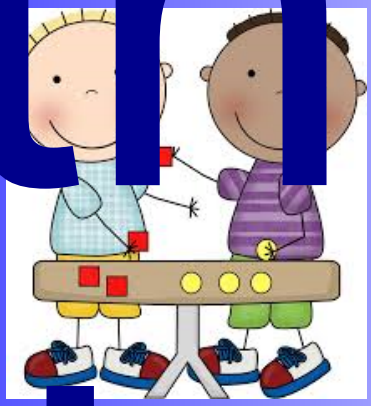
1) (+4) + (-9) = -5
2) 60 - 11 = 49
3) ½ Of 42 = 21
4) 9 000 ÷ 100 = 90
5) 50 ÷ 5 = 10
6) 14 X 100 = 1400
7) 112 X 2 = 224
8) 3 X 25 = 75
9) What number is divisible by 4? a) 214 b) 216 c) 118
10) 275 ÷ 25 = 11

Partners... BUT I pick

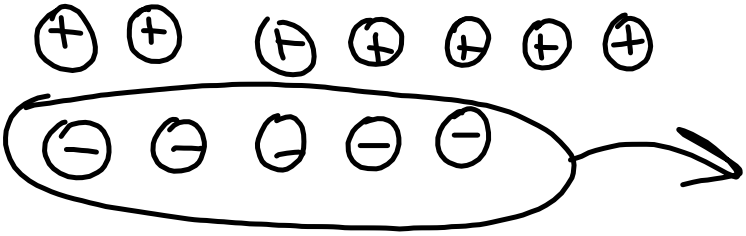


ubtracti integers ing tiles

Connect

To use tiles to subtract integers, we model the first integer, then take away the number of tiles indicated by the second integer.

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

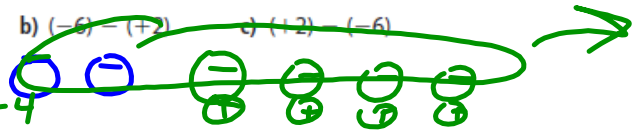


(+) − (+)
(+) − (−)
(−) − (−)
(−) − (+)

Example

Use tiles to subtract.

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



A Solution

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

Model -2.

There are not enough tiles to take away -6.
To take away -6, we need 4 more red tiles.

We add zero pairs without changing the value.
Add 4 red tiles and 4 yellow tiles.

Now take away 6 red tiles.

Since 4 yellow tiles remain, we write: $(-2) - (-6) = +4$

b) $(-6) - (+2)$

Model -6.

There are no yellow tiles to take.
We need 2 yellow tiles to take away.

We add zero pairs.
Add 2 yellow tiles and 2 red tiles.

Now take away 2 yellow tiles.

Since 8 red tiles remain, we write: $(-6) - (+2) = -8$

c) $(+2) - (-6)$

Model $+2$.

There are no red tiles to take.
We need 6 red tiles to take away.

We add zero pairs.
Add 6 red tiles and 6 yellow tiles.

Now take away 6 red tiles.

Since 8 yellow tiles remain, we write: $(+2) - (-6) = +8$

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

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

$4 - 2 = 2$

$2 - 4 =$

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

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

Bang!

Notice the results in the *Example*, parts b and c.
When we reverse the order in which we subtract two integers, the answer is the opposite integer.

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

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

Practice

1. Use tiles to subtract. Draw pictures of the tiles you used.

a) (+7) − (+4) b) (−2) − (−2) c) (−9) − (−6)
d) (+4) − (+2) e) (−8) − (−1) f) (+3) − (+3)

2. Use tiles to subtract.

a) (−1) − (−4) b) (+3) − (+8) c) (−4) − (−11)
d) (+7) − (+8) e) (−4) − (−6) f) (+1) − (+10)

3. Subtract.

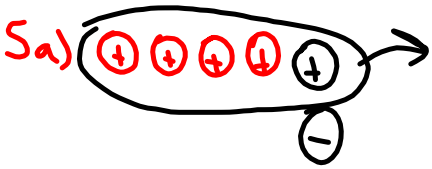
a) (−4) − (−1) b) (+8) − (+3) c) (−11) − (−4)
d) (+8) − (+7) e) (−6) − (−4) f) (+10) − (+1)

4. Subtract. Write the subtraction equations.

a) (+4) − (−7) b) (−2) − (+8) c) (−9) − (+5)
d) (+6) − (−8) e) (−3) − (+6) f) (−5) − (+7)

5. Subtract.

a) (+4) − (+5) = −1 b) (−3) − (+5) c) (−4) − (+3)
d) (−1) − (−8) e) (+8) − (−2) f) (+4) − (−7)

5a) 

(−4) − (+7)

p. 69
Q. 1-5
7, 8

10, 14

7. **a)** Use coloured tiles to subtract each pair of integers.

i) $(+3) - (+1)$ and $(+1) - (+3)$

ii) $(-3) - (-2)$ and $(-2) - (-3)$

iii) $(+4) - (-3)$ and $(-3) - (+4)$

b) What do you notice about each pair of questions in part a?

9. **Assessment Focus** Use integers.
Write a subtraction question that would give each answer.
How many questions can you write each time?

a) $+2$ **b)** -3 **c)** $+5$ **d)** -6

10. Which expression in each pair has the greater value? Explain your reasoning.

a) **i)** $(+3) - (-1)$ **ii)** $(-3) - (+1)$

b) **i)** $(-4) - (-5)$ **ii)** $(+4) - (+5)$

11. **Take It Further**

a) Find two integers with a sum of -1 and a difference of $+5$.

b) Create and solve a similar integer question.

12. **Take It Further** Copy and complete.

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

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

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

14. **Take It Further** Here is a magic square.

a) Subtract $+4$ from each entry.
Is it still a magic square? Why?

b) Subtract -1 from each entry.
Is it still a magic square? Why?

0	+5	−2
−1	+1	+3
+4	−3	+2