




# Subtract directed numbers

1 What is the total value when one counter is removed from each set?  
Complete the calculations.

a)   
 $-4 - (-1) = \boxed{-3}$

b)   
 $-7 - (-1) = \boxed{-6}$

c)   
 $-10 - (-1) = \boxed{-9}$

Discuss what happens with a partner.

2 Complete the calculations.  
Use counters to help you.



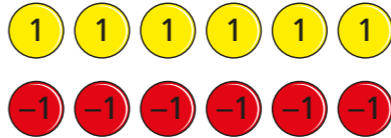
a)  $-5 - (-1) = \boxed{-4}$

b)  $-5 - (-2) = \boxed{-3}$


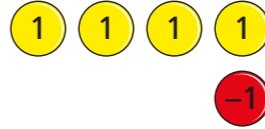
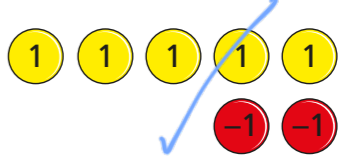
c)  $-5 - (-3) = \boxed{-2}$

d)  $-5 - (-5) = \boxed{0}$

3 What is the total value of the set of counters?

 total =

4 What is the total value of each set of counters?

Tick the set of counters that will help you to work out the answer to  $3 - (-2)$

Explain your choice.

*There are 2 negative counters to take away.*

Complete the calculation.  $3 - (-2) = \boxed{5}$

5 Complete the calculations.

$3 - (-1) = \boxed{4}$

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

$3 - (-4) = \boxed{7}$

Talk about your answers with a partner.



6 Complete the sequence of subtractions.

$4 - 4 = \boxed{0}$	$4 - (-1) = \boxed{5}$
$4 - 3 = \boxed{1}$	$4 - (-2) = \boxed{6}$
$4 - 2 = \boxed{2}$	$4 - (-3) = \boxed{7}$
$4 - 1 = \boxed{3}$	$4 - (-4) = \boxed{8}$
$4 - 0 = \boxed{4}$	

What do you notice?

7 Brett says  $-5 - 4 = 9$

What mistake do you think Brett has made?

He has seen two negatives and wrongly assumed they make a positive.  $-5 - 4 = -9$

8 Work out the calculations.

a) $0 - 7 = \boxed{-7}$	f) $0 - (-7) = \boxed{7}$
b) $2 - 7 = \boxed{-5}$	g) $-2 - 7 = \boxed{-9}$
c) $2 - (-7) = \boxed{9}$	h) $-2 - (-7) = \boxed{5}$
d) $3 - (-5) = \boxed{8}$	i) $-10 - 3 = \boxed{-13}$
e) $\boxed{-5} = -7 - (-2)$	j) $-10 - (-3) = \boxed{-7}$



9 Work out the missing numbers.

a) $8 - \boxed{19} = -11$	e) $11 = 8 - \boxed{-3}$
b) $-8 - \boxed{3} = -11$	f) $11 = -8 - \boxed{-19}$
c) $8 - \boxed{3} = 5$	g) $-5 = 8 - \boxed{13}$
d) $-8 - \boxed{-13} = 5$	h) $-5 = -8 - \boxed{-3}$

10 Work out the missing numbers.

a) $-4 - (-13) = 7 - \boxed{-2}$	c) $\boxed{-16} - 4 = -7 - 13$
b) $-13 - 4 = \boxed{-24} - (-7)$	d) $-7 - \boxed{2} = -13 - (-4)$

11 Find pairs of numbers to complete the statements.

e.g.

a) $8 - (-9) = \boxed{20} - \boxed{3}$
b) $\boxed{4} - \boxed{3} = -8 - (-9)$
c) $-9 - \boxed{-9} = \boxed{-8} - (-8)$

How many different solutions can you find?

12 Class 7A recorded the temperature during winter every day.

Day	Temperature (°C)
Monday	-6
Tuesday	-3
Wednesday	1
Thursday	-4
Friday	2
Saturday	-2

What is the range of the temperatures?

$\boxed{8^{\circ}\text{C}}$