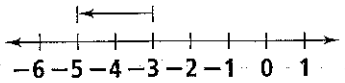
Additional Examples — Lesson 1-5

1 EXAMPLE Subtract $-3 - 2$ using a number line.

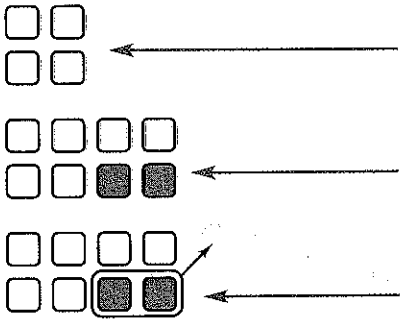


Start at -3.
Move left 2 units.

$-3 - 2 = -5$

Additional Examples — Lesson 1-5

2 EXAMPLE Subtract $4 - (-2)$ using tiles.



Start with 4 positive tiles.

Add zero pairs until there are 2 negative tiles.

Remove 2 negative tiles.

There are 6 positive tiles left.
$4 - (-2) = 6$

3 EXAMPLE Simplify $-11.6 - (-14)$.

$-11.6 - (-14) = -11.6 + 14$ The opposite of -14 is 14.
$= 2.4$ Add.

4 EXAMPLE Simplify $|-13 - (-21)|$.

$|-13 - (-21)| = |-13 + 21|$ The opposite of -21 is 21.
$= |8|$ Add within absolute value symbols.
$= 8$ Find the absolute value.

5 EXAMPLE Evaluate $x - (-y)$ for $x = -3$ and $y = -6$.

$x - (-y) = -3 - [-(-6)]$ Substitute -3 for x and -6 for y.
$= -3 - 6$ The opposite of -6 is 6.
$= -9$ Subtract.

6 EXAMPLE The temperature in Montreal, Canada, at 6:00 P.M. was $-8°C$. Find the temperature at 10:00 P.M. if it fell 7°C.

Find the temperature at 10:00 P.M. by subtracting 7°C from the temperature at 6:00 P.M.

$-8 - 7 = -8 + (-7)$ Add the opposite.
$= -15$ Simplify.

The temperature at 10:00 P.M. was $-15°C$.