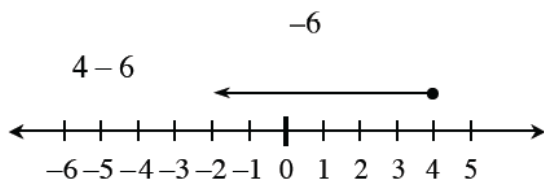## SUBTRACTION OF INTEGERS

Subtraction of integers may also be represented using the concrete models of number lines and (+) and (−) tiles. Subtraction is the opposite of addition so it makes sense to do the opposite actions of addition.
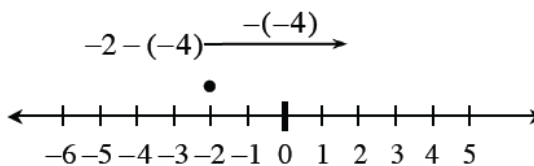
When using the number line, adding a positive integer moves to the right so subtracting a positive integer moves to the left. Adding a negative integer move to the left so subtracting a negative integer moves to the right.

Example 1

$4 - 6$

-6

−6 −5 −4 −3 −2 −1 0 1 2 3 4 5

$4 - 6 = -2$

Example 2

$-2 - (-4)$

$-(-4)$

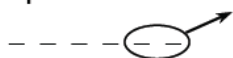−6 −5 −4 −3 −2 −1 0 1 2 3 4 5

$-2 - (-4) = 2$

Problems

Find each difference.

1. $-6 - (-2)$

2. $2 - (-3)$

3. $6 - (-3)$

4. $3 - 7$

5. $7 - (-3)$

6. $7 - 3$

7. $5 - (3)$

8. $-12 - (-10)$

9. $-12 - 10$

10. $12 - (-10)$

11. $-6 - (-3) - 5$

12. $6 - (-3) - 5$

13. $8 - (-8)$

14. $-9 - 9$

15. $-9 - 9 - (-9)$

answers on next page…

Answers (and possible models)

1. −4

```
 – – – – –⊖⊝⟶
```

2. 5

```
◄─┼─┼─┼─┼─┼─┼─│─┼─●──►─┼─┼─►
   −6 −5 −4 −3 −2 −1 0 1 2 3 4 5
```

3. 9

```
+ + + + +      + + +
          ⊝⊖⊝⟶
```

4. −4

```
        ◄──────────●
◄─┼─┼─┼─┼─┼─┼─┃─┼─┼─┼─┼─►
   −6 −5 −4 −3 −2 −1 0 1 2 3 4 5
```

5. 10

```
+ + + + + + +    + + +
             ⊝⊝⊝⟶
```
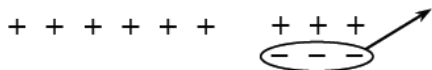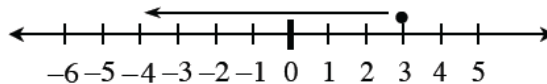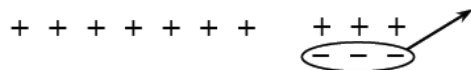
6. 4

7. 2

8. −2

9. −22

10. 22

11. −8

12. 4

13. 16

14. −18

15. −9