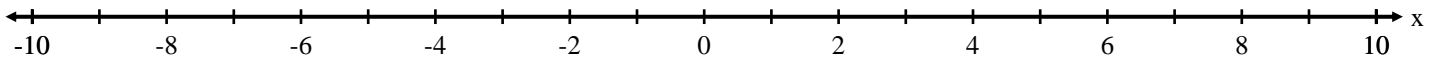## Walking The Number Line
To Subtract Integers

Sketch the moves on the number line for each pair of expressions drawing the addition expression above the line and the subtraction expression below.
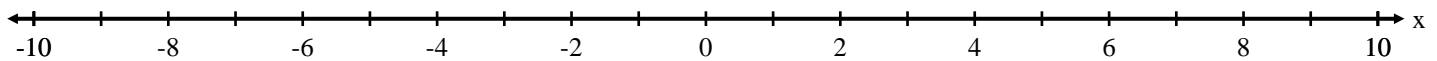
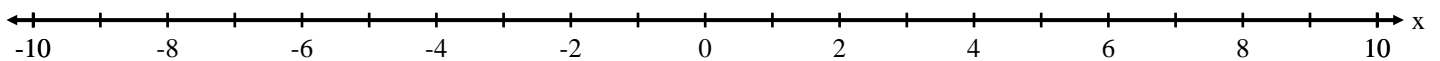**1. 1 + -4**   **1 − 4**
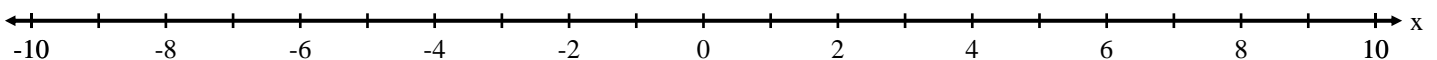

-10   -8   -6   -4   -2   0   2   4   6   8   10   x

2. -2 + - 5   **-2 − 5**

-10   -8   -6   -4   -2   0   2   4   6   8   10   x

3. -1 + 4   **-1 − (-4)**

-10   -8   -6   -4   -2   0   2   4   6   8   10   x

4. -3 + 6   **-3 − -6**

-10   -8   -6   -4   -2   0   2   4   6   8   10   x
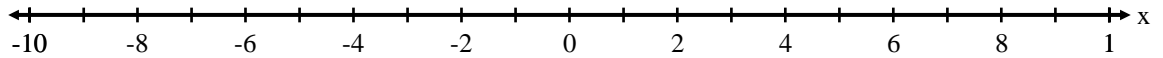
In each pair of expressions above, what remained the same and what changed?

1. 7 − 3

```
←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→ x
  -10   -8   -6   -4   -2   0   2   4   6   8   1
```

2. -2 − 5

```
←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→ x
  -10   -8   -6   -4   -2   0   2   4   6   8   1
```

3. -1 − 4

```
←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→ x
  -10   -8   -6   -4   -2   0   2   4   6   8   1
```
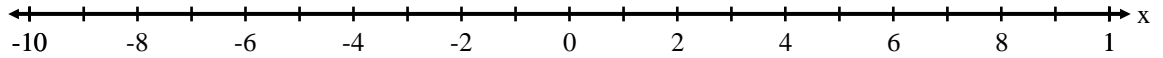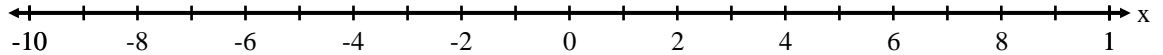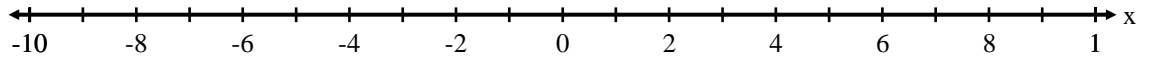
Write a rule for writing a related addition expression <u>when a positive number is being subtracted:</u>

4. -2 − (-4)

```
←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→ x
  -10   -8   -6   -4   -2   0   2   4   6   8   1
```

5. -5 − (-3)

```
←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→ x
  -10   -8   -6   -4   -2   0   2   4   6   8   1
```

6. 1 − (-4)

```
←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→ x
  -10   -8   -6   -4   -2   0   2   4   6   8   1
```
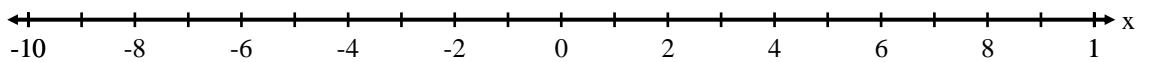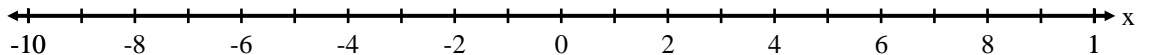
Write a rule for writing a related addition expression <u>when a negative number is being subtracted:</u>

Write a related addition problem for each problem below. Then, use your addition rules to find the answer.

7.   -9 − 4

8.   7 − 10

9.   -8 − (-2)

10.   1 − -7

11.   -5 − (-5)

12.   -5 − 5