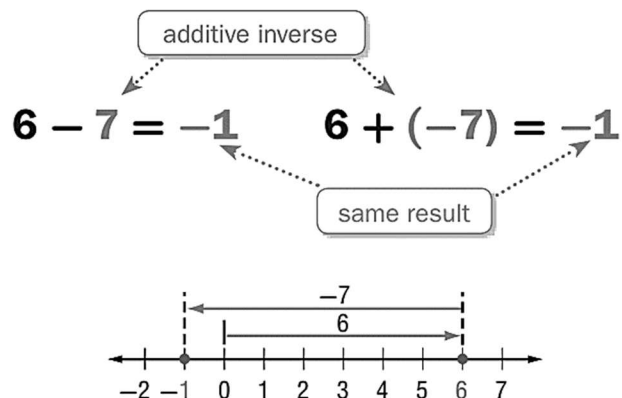


# Subtracting Rational Numbers

Are you able to add rational numbers? Then you are able to subtract integers.

To subtract an integer, add its additive inverse. In other words, you subtract rational numbers by adding the opposite.



## Examples:

### 1. Find $8 - 13$ .

$$8 - 13 = 8 + (-13) \quad \text{To subtract 13, add -13.}$$

$$= -5 \quad \text{Simplify.}$$

Check by adding  $-5 + 13 \stackrel{?}{=} 8$

$$8 = 8 \checkmark$$

### 2. Find $-10 - 7$ .

$$-10 - 7 = -10 + (-7) \quad \text{To subtract 7, add -7.}$$

$$= -17 \quad \text{Simplify.}$$

Check by adding  $-17 + 7 \stackrel{?}{=} -10$

$$-10 = -10 \checkmark$$

## You Try:

### Subtract.

- |                  |                   |                  |
|------------------|-------------------|------------------|
| 1) $5 - 2$       | 2) $6 - (-7)$     | 3) $-3 - 2$      |
| 4) $8 - 13$      | 5) $-7 - (-7)$    | 6) $6 - 12$      |
| 7) $15 - (-7)$   | 8) $-15 - 6$      | 9) $-3 - 8$      |
| 10) $-10 - 12$   | 11) $13 - (-12)$  | 12) $14 - (-22)$ |
| 13) $10 - (-20)$ | 14) $-16 - 14$    | 15) $-25 - 25$   |
| 16) $6 - (-31)$  | 17) $-18 - (-40)$ | 18) $15 - (-61)$ |

Evaluate each expression if  $r = -4$ ,  $s = 10$ , and  $t = -7$ .

- |                |             |
|----------------|-------------|
| 19) $r - 7$    | 20) $t - s$ |
| 21) $s - (-8)$ | 22) $t - r$ |
| 23) $s - t$    | 24) $r - s$ |