

SUBTRACTING REAL NUMBERS

Change subtraction to
"add the opposite."

EXAMPLES: Find the difference.

$$1. \ 10 \overset{-}{-} 11 \longrightarrow 10 + (-11) \longrightarrow ? \quad -1$$

$$2. \ -4 \overset{+}{+} (-2) \longrightarrow -4 + 2 \longrightarrow ? \quad -2$$

$$3. \ -6 \overset{-}{-} 7 \longrightarrow -6 + (-7) \longrightarrow ? \quad -13$$

$$4. \ 9 \overset{+}{+} (-2) \longrightarrow 9 + 2 \longrightarrow ? \quad 11$$

$$5. \ -3 \overset{-}{-} 5$$

$$-8$$

$$6. \ 10 \overset{-}{-} 12.7$$

$$-2.7$$

$$\begin{array}{r} 12.7 \\ \underline{10.0} \end{array}$$

$$7. \ 1 \overset{-}{-} (-2) - 6$$

$$3 + 6$$

$$-3$$

$$8. \ -2.1 \overset{-}{-} 1.4$$

$$-3.5$$

$$\begin{array}{r} 2.1 \\ \underline{1.4} \end{array}$$

9. $11 - |-4|$

$$11 - 4$$

$$7$$

10. $|8| - 20$

$$8 + ^{-}20$$

$$-12$$

11. $-34 - |2|$

$$-34 + ^{-}2$$

$$-36$$

12. $|39| - |15|$

$$39 + ^{-}15$$

$$24$$

13. Evaluate the function $y = -5 - x$ when $x = -2, -1, 0,$ and 1 . Organize your results in a table.

| Input | Function | Output |
|-------|-------------|--------|
| -2 | $-5 - (-2)$ | -3 |
| -1 | $-5 - (-1)$ | -4 |
| 0 | $-5 - 0$ | -5 |
| 1 | $-5 - 1$ | -6 |

14. Evaluate the function $y = 4 - x$ when $x = -3, -1, 2,$ and 5 . Organize your results in a table.

| Input | Function | Output |
|-------|------------|--------|
| -3 | $4 - (-3)$ | 7 |
| -1 | $4 - (-1)$ | 5 |
| 2 | $4 + (2)$ | 2 |
| 5 | $4 + (5)$ | -1 |

15. Evaluate the function $y = x - 8$ when $x = -4, -2, 0,$ and 3 . Organize your results in a table.

| Input | Function | Output |
|-------|------------|--------|
| -4 | $(-4) - 8$ | -12 |
| -2 | $(-2) - 8$ | -10 |
| 0 | $(0) - 8$ | -8 |
| 3 | $(3) - 8$ | -5 |

16. Evaluate the function $y = x - 6$ when $x = -4, -2, 0,$ and 3 . Organize your results in a table.

| Input | Function | Output |
|-------|--------------|--------|
| -4 | $-(-4) + -6$ | -2 |
| -2 | $-(-2) + -6$ | -4 |
| 0 | $-(0) + -6$ | -6 |
| 3 | $-(3) + -6$ | -9 |

When an expression is written as a **sum**, the parts that are added are the **terms** of the expression.

$-5 - x$ ----- $\underline{-5} \oplus \underline{(-x)}$ ----- so the terms are -5 and $-x$

What are the terms of the following?

17. $9 + -2x$
 $9, -2x$

18. $-6k + 7y$
 $-6k, 7y$

19. $-2t + 5b$
 $-2t, 5b$

20. $34f - 25g + 31h$
 $34f, -25g, 31h$

21. $91m + 45n + -23j$
 $91m, 45n, -23j$