

# Interesting Integers

## Adding Signed Numbers on the Number Line

### Sample

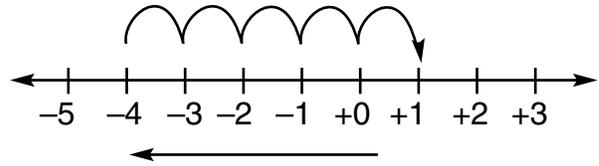
$$\begin{array}{r} -4 \\ + +5 \\ \hline +1 \end{array}$$

Step 1: Start at 0.

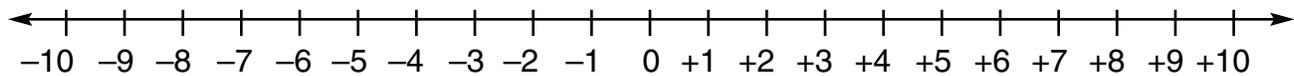
Step 2: Go left 4 spaces for  $-4$ .

Step 3: From  $-4$ , go right 5 spaces.

Step 4: Answer =  $+1$



**Directions:** Use a long strip of paper to make a longer number line to help you with this unit. Complete the strip to positive 25 ( $+25$ ) and to negative 25 ( $-25$ ). Study the Facts and Reminders page for this unit and use your number line to help you do these addition problems. Remember, always start at zero (0) when adding on the number line.



1. 
$$\begin{array}{r} -4 \\ + -6 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} -6 \\ + -2 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} +3 \\ + +4 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} -9 \\ + -7 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} -12 \\ + -9 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} -16 \\ + -8 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} -23 \\ + +10 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} +24 \\ + -14 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} +18 \\ + -16 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} -25 \\ + +12 \\ \hline \end{array}$$

11. 
$$\begin{array}{r} +13 \\ + -19 \\ \hline \end{array}$$

12. 
$$\begin{array}{r} -19 \\ + +17 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} +20 \\ + -13 \\ \hline \end{array}$$

14. 
$$\begin{array}{r} -7 \\ + -17 \\ \hline \end{array}$$

15. 
$$\begin{array}{r} -13 \\ + +9 \\ \hline \end{array}$$

16. 
$$\begin{array}{r} -11 \\ + -12 \\ \hline \end{array}$$

17. 
$$\begin{array}{r} +15 \\ + +10 \\ \hline \end{array}$$

18. 
$$\begin{array}{r} -18 \\ + +15 \\ \hline \end{array}$$

19. 
$$\begin{array}{r} -18 \\ + -7 \\ \hline \end{array}$$

20. 
$$\begin{array}{r} +5 \\ + -20 \\ \hline \end{array}$$

21. 
$$\begin{array}{r} +6 \\ + -27 \\ \hline \end{array}$$

# Interesting Integers

## Adding Signed Numbers

To add numbers with the *same* sign, add the numbers and keep the sign.

$$\begin{array}{r} +23 \\ + +14 \\ \hline +37 \end{array}$$

$$\begin{array}{r} -40 \\ + -15 \\ \hline -55 \end{array}$$

To add numbers with *different* signs, subtract the number with the smaller absolute value from the number with the larger absolute value. Then use the sign of the number with the higher absolute value.

$$\begin{array}{r} +40 \\ + -20 \\ \hline +20 \end{array}$$

$$\begin{array}{r} -70 \\ + +35 \\ \hline -35 \end{array}$$

$$\begin{array}{r} +80 \\ + -40 \\ \hline +40 \end{array}$$

**Directions:** Study the Facts and Reminders page for this unit. Use a number line to help you check your work. The first one is done for you.

1. 
$$\begin{array}{r} +25 \\ + -19 \\ \hline +6 \end{array}$$

2. 
$$\begin{array}{r} +19 \\ + -23 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} +23 \\ + -7 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} -34 \\ + -25 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} +56 \\ + -45 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} -67 \\ + +54 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} -98 \\ + +76 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} +76 \\ + -45 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} +76 \\ + -99 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} -100 \\ + +78 \\ \hline \end{array}$$

11. 
$$\begin{array}{r} +124 \\ + -145 \\ \hline \end{array}$$

12. 
$$\begin{array}{r} +200 \\ + -234 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} -99 \\ + -11 \\ \hline \end{array}$$

14. 
$$\begin{array}{r} -231 \\ + +199 \\ \hline \end{array}$$

15. 
$$\begin{array}{r} +145 \\ + -201 \\ \hline \end{array}$$

16. 
$$\begin{array}{r} -238 \\ + +198 \\ \hline \end{array}$$

17. 
$$\begin{array}{r} +900 \\ + -450 \\ \hline \end{array}$$

18. 
$$\begin{array}{r} -456 \\ + -123 \\ \hline \end{array}$$

19. 
$$\begin{array}{r} +932 \\ + -756 \\ \hline \end{array}$$

20. 
$$\begin{array}{r} -1000 \\ + +999 \\ \hline \end{array}$$

21. 
$$\begin{array}{r} +789 \\ + -987 \\ \hline \end{array}$$

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## Multiplying Signed Numbers

To multiply  $-2 \times 3$  on the number line, follow the steps below.

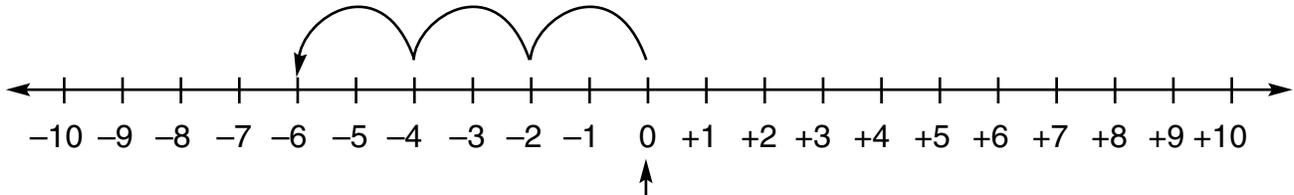
1. Start at zero (0).

2. Move 2 places to the left to  $-2$ .

3. Move 2 more places to the left to  $-4$ .

4. Move 2 more places to the left to  $-6$ .

$$\begin{array}{r} -2 \\ -2 \\ + -2 \\ \hline -6 \end{array}$$



**Directions:** Study the Facts and Reminders sheet from this unit. Use a number line to help you do these problems.

1.  $-5 \times 3 =$  \_\_\_\_\_

2.  $+5 \times 5 =$  \_\_\_\_\_

3.  $-4 \times 5 =$  \_\_\_\_\_

4.  $-6 \times 3 =$  \_\_\_\_\_

5.  $-9 \times 2 =$  \_\_\_\_\_

6.  $-7 \times 3 =$  \_\_\_\_\_

7.  $\begin{array}{r} +8 \\ \times -9 \\ \hline \end{array}$

8.  $\begin{array}{r} -10 \\ \times -9 \\ \hline \end{array}$

9.  $\begin{array}{r} -20 \\ \times -10 \\ \hline \end{array}$

10.  $\begin{array}{r} +12 \\ \times -12 \\ \hline \end{array}$

11.  $\begin{array}{r} -12 \\ \times -12 \\ \hline \end{array}$

12.  $\begin{array}{r} +10 \\ \times -10 \\ \hline \end{array}$

13.  $\begin{array}{r} -15 \\ \times -10 \\ \hline \end{array}$

14.  $\begin{array}{r} +15 \\ \times +10 \\ \hline \end{array}$

15.  $\begin{array}{r} -15 \\ \times +10 \\ \hline \end{array}$

16.  $\begin{array}{r} -20 \\ \times -20 \\ \hline \end{array}$

17.  $\begin{array}{r} +20 \\ \times -20 \\ \hline \end{array}$

18.  $\begin{array}{r} -20 \\ \times +20 \\ \hline \end{array}$

19.  $\begin{array}{r} -100 \\ \times -10 \\ \hline \end{array}$

20.  $\begin{array}{r} +100 \\ \times +10 \\ \hline \end{array}$

21.  $\begin{array}{r} -100 \\ \times +10 \\ \hline \end{array}$