

# Algebra I

## 2-4

### Subtraction

Definition of Subtraction -  $x - y$ ,  $x + (-y)$   
 $3 - 7$ ,  $3 + (-7)$   
-4

Simplify.

$$\begin{array}{r} 1) \ 25 - 213 \\ - 188 \\ \hline \end{array}$$

$$\begin{array}{r} 283 \\ 25 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 5) \ -19 - (-3) \\ -19 + 3 \\ \hline -16 \end{array}$$

$$\begin{array}{r} 17) \ 132 - (72 - 61) \\ 132 - (11) \\ \hline 121 \end{array}$$

$$\begin{array}{r} 29) \ 4 - 5 + 8 - 17 + 31 \\ \underline{4} \quad \underline{-5} \quad \underline{+8} \quad \underline{-17} \quad \underline{+31} \\ -1 \quad -9 \quad +31 \\ \underline{-10} \quad \underline{+31} \\ 21 \end{array}$$

For example #17, I see positive 132 and negative 11. To evaluate, I just ask myself, what does a positive 132 and a negative 11 equal?

The best way I can explain this lesson is to view the subtractions as negative numbers and the additions as positive numbers. Then don't worry about subtracting, just follow the negatives.

Try on your own!

$$\begin{array}{r} 31) \ -6 - 19 + 4 - 8 + 20 \\ \underline{-6} \quad \underline{-19} \quad \underline{+4} \quad \underline{-8} \quad \underline{+20} \\ -25 \quad -4 \quad +20 \\ \underline{-29} \quad \underline{+20} \\ -9 \end{array}$$

-9  
-13  
-11

$$\begin{array}{r} 37) \ -(x - 7) \\ -x + 7 \end{array}$$

Distributive Property

$$\begin{array}{r} 47) \ 7 + y - (7 - y) - y \\ \underline{7} \quad \underline{+y} \quad \underline{-7} \quad \underline{+y} \quad \underline{-y} \\ y \end{array}$$

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2-60 even