

7th Grade  
Feb 19, 2021

Today we will:

- turn in THQ
- review video notes
- do 3 more examples
- complete WS and check together by end of class



HOMWORK:

ALEKS assignment:  
60 min and 5 topics  
due Monday by 11:59pm

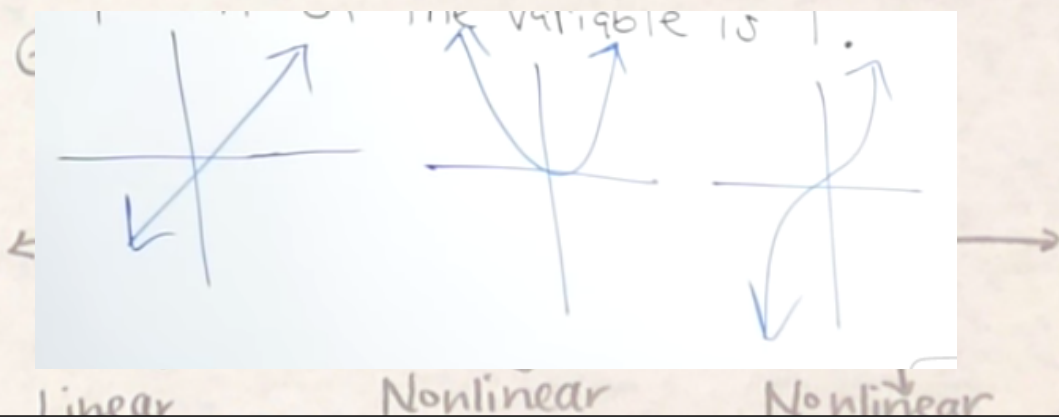


7-3  
Gr. 7

## Adding Linear Expressions

Linear expressions	$-4x$	$3x+5$	$5-\frac{1}{6}x$
Nonlinear expressions	$x^2$	$-7x^3+x$	$x^5+1$

Linear expression - an algebraic expression in which the exponent of the variable is 1.



Example 1:

Find each sum.

a)  $(x-2) + (3x+8)$

$$\begin{array}{r} x-2 \\ + 3x+8 \\ \hline 4x+6 \end{array}$$

b)  $(-4y+3) + (11y-5)$

$$-4y+3+11y+(-5)$$

$$-4y+11y+3+(-5)$$

$$7y+(-2)$$

$$\boxed{7y-2}$$

Example 2:

Simplify

$$2(-7.5x+3) + (5x-2)$$

$$-15x+6+5x-2$$

$$\boxed{-10x+4}$$

Try On Your Own: Find the sum.

1.  $(3x+2) + (2x-1)$

$$3x+2$$

2.  $(-8z+4) + (8z-7)$

$$-8z+4$$

$$+ 8z-7$$

$$\hline 0z-3 = -3$$

3.  $(4-n) + 2(-5n+3)$

$$4-n + -10n+6$$

$$-11n+10$$

4.  $\frac{1}{2}(w-6) + \frac{1}{4}(w+12)$

$$\frac{1}{2}w-3$$

$$+ \frac{1}{4}w+3$$

$$\hline \frac{3}{4}w$$

Examples  
Simplify.

$$(3x + 2) + (x - 6)$$

$$4x + -4$$

or  $4x - 4$

$$(5y + 8) + (2y - 3)$$

$$\begin{array}{r} 5y + 8 \\ + 2y - 3 \\ \hline 7y + 5 \end{array}$$

$7y + 5$

$$(8g + 9h - 2) + (3g - 2h)$$

$$11g + 7h - 2$$



## Lesson 3 HW Practice/In-Class Assignment

### Adding Linear Expressions

Add.

1.  $(5x + 21) + (10x + 13)$

$$\begin{array}{r} 5x + 21 \\ 10x + 13 \\ \hline 15x + 34 \end{array}$$

2.  $(-9x + 12) + (-5x + 14)$

$$\begin{array}{r} -9x + 12 \\ + -5x + 14 \\ \hline -14x + 26 \end{array}$$

3.  $(-4x + 6) + (6x - 10)$

$$\begin{array}{r} -4x + 6 \\ + 6x - 10 \\ \hline 2x - 4 \end{array}$$

4.  $(4x + 17) + (15x - 16)$

$$\begin{array}{r} 4x + 17 \\ + 15x - 16 \\ \hline 19x + 1 \end{array}$$

5.  $(-3x - 1) + (-x - 9)$

$$\begin{array}{r} -3x - 1 \\ + -1x - 9 \\ \hline -4x - 10 \end{array}$$

6.  $(2x - 6) + (-7x + 5)$

$$\begin{array}{r} 2x - 6 \\ + -7x + 5 \\ \hline 5x - 1 \end{array}$$

7.  $(-x + 27) + (16x + 4)$

$$\begin{array}{r} -1x + 27 \\ + 16x + 4 \\ \hline 15x + 31 \end{array}$$

8.  $(-16x - 14) + (13x + 26)$

$$\begin{array}{r} -16x - 14 \\ + 13x + 26 \\ \hline -3x + 12 \end{array}$$



