

7th Grade  
April 12, 2021

Today we will:

- Get new table of contents for Unit 9 Functions
- Take video notes in class
- Begin HW




HOMEWORK:

Pg 387 WS

No ALEKS assignment due tonight






 Name \_\_\_\_\_  
 Unit 9 Lesson 1 Due Date 4/12

Vocab **Vocabulary**

Function

Independent variable

Dependent variable

Vertical line test

Function rule

Function notation

1. Determine whether each relation is a function. Explain.

a.  $\{(54, 112), (56, 130), (55, 145), (54, 123), (56, 128)\}$

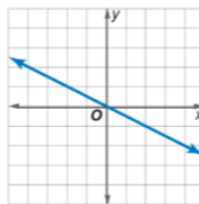
b.

x	4	7	6	3	5	2
y	6	10	11	8	4	9

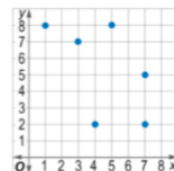
1

2

2. Determine whether the graph below is a function. Explain your answer.



Determine whether the graph below is a function. Explain your answer.



3. If  $f(x) = 4x - 7$ , find each function value.

- a.  $f(5)$                       b.  $f(-6)$

If  $f(x) = 6x + 5$ , find each function value.


- a.  $f(7)$   
b.  $f(-4)$

4. Mariah spent \$22.50 downloading songs to her digital music player from an online music store for \$0.90 each.

- a. Identify the independent and dependent variables. Then write a function to represent the total cost of any number of songs.  
b. Use the function to determine the number of songs that Mariah downloaded.

1 a.

2

<b>Words</b>	total cost = cost per song times the number of songs
	
<b>Function</b>	

3 The function is \_\_\_\_\_

- 4 b.    Write the function.  
    Substitute 22.5 for  $c(s)$ .  
    Divide each side by 0.9.

5 So, Mariah downloaded \_\_\_ songs.



**HOMWORK**



Name \_\_\_\_\_

Unit \_\_\_\_ Lesson \_\_\_\_\_ Due Date \_\_\_\_\_

Show your work on the lines UNDER THESE PROBLEMS. You will not get credit for doing the homework if you do not show work. LABEL each problem and go down the left margin. Use the back if necessary.

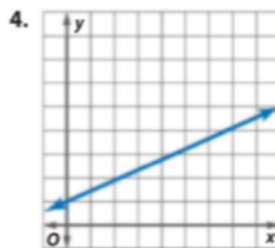
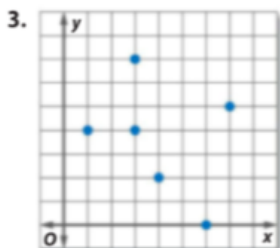
**Guided Practice**

Determine whether each relation is a function. Explain. (Examples 1 and 2)

1.  $\{(8, 2), (4, 3), (6, 5), (1, 5)\}$

2.

x	1	3	8	7	3
y	4	2	9	6	4



If  $f(x) = 6x - 4$ , find each function value. (Example 3)

5.  $f(3)$

6.  $f(-5)$

7.  $f(8)$

8.  $f(-9)$

9. The Milligan family spent \$215 to have their family portrait taken. The portrait package they would like to purchase costs \$125. In addition, the photographer charges a \$15 sitting fee per person in the portrait. (Example 4)

- a. Identify the independent and dependent variables. Then write a function to represent the total cost of any number of people in the portrait.
- b. Use the equation to find the number of people in the portrait.