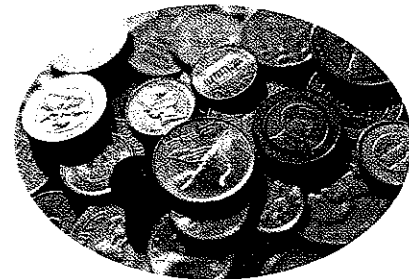


Lesson 2.4 ~ Rate of Change

Determine the rate of change for each situation.

14. Jordan collected 28 coins in 4 days.  
 15. Rebecca drove 270 miles in 6 hours.  
 16. Shea spent \$4.56 for 12 doughnuts.



Determine the rate of change and start value for each table.

17.

$x$	$y$
0	2
1	9
2	16
3	23
4	30

18.

$x$	$y$
0	33
3	0
5	-22
6	-33
8	-55

19.

$x$	$y$
-1	9
1	17
3	25
5	33
8	45

20. Maria began an exercise plan at the beginning of the school year. In the table shown below, Maria recorded her weight at different points during the school year. Assume Maria loses the same amount every week.
- How many pounds is Maria losing each week?
  - How much did she weigh when she first started this exercise plan?
  - If this pattern continues, how much will she weigh 17 weeks into her exercise plan?
  - Does it make sense that this pattern will continue throughout the whole school year? Why or why not?

Weeks Since Maria Started Exercising	Her Weight
1	161
5	153
7	149
10	143



Lesson 2.5 ~ Recursive Routines to Equations

Write the linear equation for each recursive rule.

21. Rate of Change = +6  
Start Value = -2

22. Rate of Change =  $-\frac{1}{2}$   
 $y$ -intercept = 6

23. Rate of Change = +3.8  
Start Value = 1

Determine the rate of change and  $y$ -intercept for each table. Write a linear equation that represents each table.

24.

$x$	$y$
0	39
1	33
2	27
3	21
4	15

25.

$x$	$y$
-2	2.9
-1	6.4
0	9.9
1	13.4
3	20.4

26.

$x$	$y$
-2	-15
2	1
5	13
7	21
10	33