Review 4.3

1 Ms. Jamison spends \$75 each month eating out at fast food restaurants. She plans to reduce her spending for fast food by \$5 each month until she has reduced her spending to \$25 per month. Which equation can be used to determine m, the number of months it will take for Ms. Jamison to reduce her fast food spending to \$25 per month?

$$\mathbf{A} \quad \frac{1}{3} (5m + 75) = 25$$

B
$$75m - 5m = 25$$

C
$$5m + 75m = 25$$

$$\mathbf{D} = \frac{1}{3}m + 75 = 25$$

2 Ashley mows lawns to earn money. She buys a new mower for \$200 and charges \$30 per lawn. If she mows n lawns, which of the following equations could you use to find p, Ashley's profit?

F
$$p = 30n - 200$$

G
$$p = 30n + 200$$

H
$$p = n(200 - 30)$$

J
$$p = 200 - 30n$$

3 The table shows the pattern of a sequence. Which expression describes the pattern?

n	S
1	-0.5
2	0.5
3	1.5
4	2.5

A
$$\frac{n}{5}$$

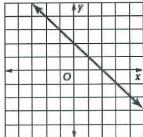
$$\mathbf{B} = \frac{n}{2} - 1$$

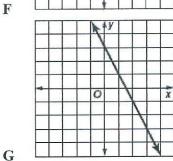
C
$$\frac{n+1}{2}$$

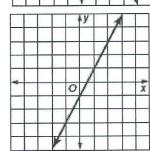
$$\mathbf{D} \quad \frac{2n-3}{2}$$

4 Which line graphed below best represents the table of values shown?

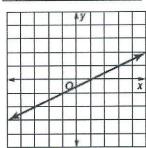
X	У
0	-1
1	1
2	3
4	7







H



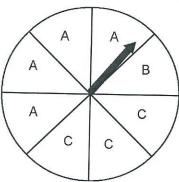
- 5 Coby has \$9 less than Melanie. Together they have \$21. Which equation could be solved to find *m*, the amount Melanie has?
 - A (m-9) + m = 21
 - **B** m + (m+9) = 21
 - C m = 21 9
 - **D** m = (21 + m) 9
- 6 Which is the next term in the pattern below?

$$1, -2, 4, -7, 11, -16, \dots$$

- **F** −21
- G -22
- **H** 21
- **J** 22
- Solve each equation. Check your solution.
- 7 8c 8 = 3c + 4
- 8 b+7=-17
 - **F** −24
 - G 10
 - **H** 24
 - J -10
- 9 c-7=-9
 - **A** −16
 - \mathbf{B} -2
 - C 16
 - **D** 2
- 10 $-11 = \frac{z}{-7}$
 - **F** −77
 - $\mathbf{G} = \frac{7}{11}$
 - **H** $\frac{11}{7}$
 - J 77
- Write an expression that can be used to find the *nth* term in the sequence. Then write the next three terms of the sequence.

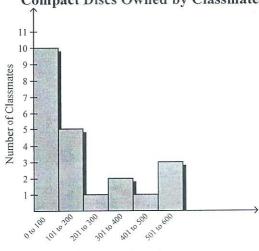
 3, 6, 9, 12,...

- Write an expression that can be used to find the *nth* term in the sequence. Then write the next three terms of the sequence.
 4, 6, 8, 10,...
- Write an expression that can be used to find the *nth* term in the sequence. Then write the next three terms of the sequence.
 4, 9, 14, 19,...
- 14 A number cube is tossed and the spinner below is spun. Find P(greater than 4 and A).



- F :
- \mathbf{G}
- $\mathbf{H} = \frac{2}{9}$
- $J = \frac{1}{6}$

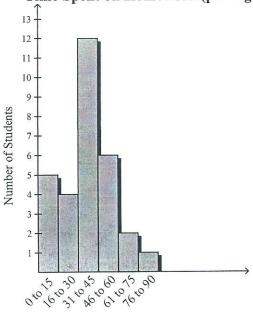
Compact Discs Owned by Classmates



Number of CDs Owned

- 15 How many classmates own more than 300 CDs?
 - **A** 16
 - **B** 2
 - **C** 6
 - **D** 22
- 16 How many classmates own at most 200 compact discs?
 - **F** 7
 - **G** 5
 - **H** 16
 - J 15
- 17 How many classmates were surveyed?
 - **A** 22
 - **B** 20
 - **C** 21
 - **D** 19

Time Spent on Homework (per night)



Time Spent (minutes)

- 18 How many students spend thirty minutes or less on homework nightly?
 - **F** 10
 - **G** 21
 - **H** 9
 - J 5
- 19 How many students spend more than one hour on homework nightly?
 - **A** 1
 - **B** 3
 - **C** 2
 - D none

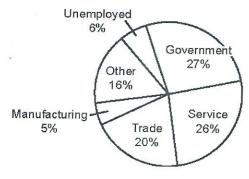
Make a circle graph for each set of data.

20

Alaska Employment Distribution (May 2000)		
Government	27%	
Service	26%	
Trade	20%	
Manufacturing	5%	
Other	16%	
Unemployed	6%	

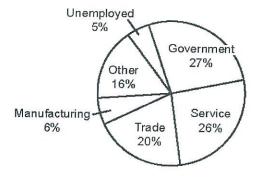
F

Alaska Employment Distribution (May 2000)



G

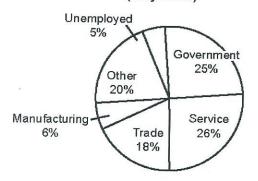
Alaska Employment Distribution (May 2000)



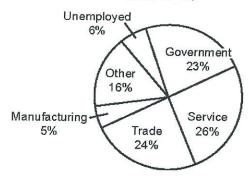
H

J

Alaska Employment Distribution (May 2000)



Alaska Employment Distribution (May 2000)

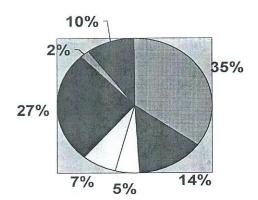


21 Jane decided to count the number of kinds of boats that passed her while she sat at a boat dock. About what percent of the boats were paddle boats?

Results of Jane's Boat Count			
Type of Boat	Tally	Frequency	
Canoes	1411	6	
Paddle Boats	IIII	4	
Row Boats	JHF III	8	
Pontoon Boats		2	
Motorized	4HF 4HF 11	12	

Use the circle graph to find the amount of the Murphys' monthly mortgage payment if they have a total monthly earnings of \$5,000. About how much do the Murphys spend on entertainment each month based on this salary?

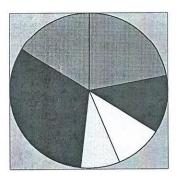
Murphy Family Monthly Budget





23 Use the circle graph to determine the percent of Adam's weekend that he spent using the computer and doing homework. Find the measure in degrees of the angles for computer use and homework sectors of the pie graph.

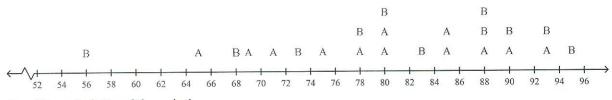
Adam's Weekend



- Working 22%
- Practicing Trumpet 12%
- □ Household Chores 10% □ Texting Friends 8%
- Using Computer 2x%
- Homework x%

Use the plot below and construct another appropriate display to represent the data. Then answer the following questions. All the scores are whole numbers.

Mr. Thompson's Geometry Classes Test Scores



- A = 4th period; B = 8th period
- 24 Make a circle graph of the data from geometry classes' test scores. What fraction of students are in the 8th period and scored 90% or higher?