

**24HourAnswers.com**

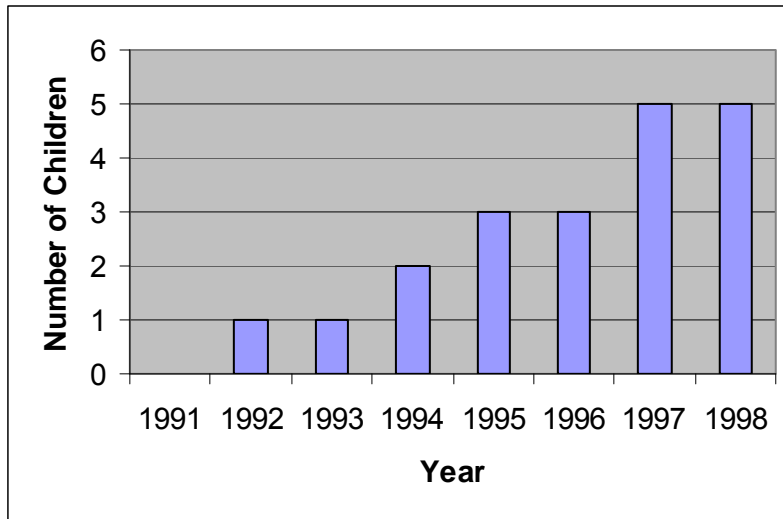
**Online Homework**

**Focused Exercises for Math SAT**

**Skill Set 5: Tables and Charts**

Many of the problems in this exercise set came from The College Board, writers of the SAT exam.

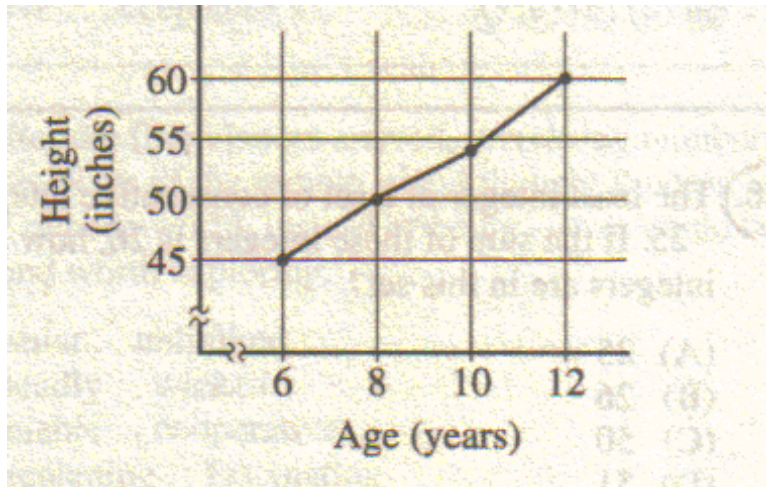
1.



The graph above shows how the Jackson family continued to grow between 1991 and 1998 by indicating the total number of children in the family at the end of each year. The Jacksons have one set of twins who were born to Mrs. Jackson one year in July. During what year were the twins born?

- (A) 1993
- (B) 1994
- (C) 1996
- (D) 1997
- (E) 1998

2.



The graph above shows Elina's height in inches from the age of 6 to the age of 12. Elina's height at the age of 12 was what percent greater than her height at the age of 6 ?

- (A) 15%
- (B) 25%
- (C)  $33\frac{1}{3}$  %
- (D) 50%
- (E)  $66\frac{2}{3}$  %

3.

**PRESTON CITY WORKFORCE**

	Employed	Unemployed	Total
Men	27,000		
Women			21,500
Total	48,000		50,500

The table above, describing the Preston City workforce, is partially filled in. Based on the information in the table, how many women in the Preston City workforce are unemployed?

- (A) 500
- (B) 1,000
- (C) 1,500
- (D) 2,000
- (E) 2,500

4.

**INVENTORY OF CLOCKS AND FREQUENCY OF CHIMES**

	Number of Clocks	Chimes $n$ Times on the $n$ th Hour	Chimes Once on the Hour	Chimes Once on the Half Hour
Type A	10	✓		✓
Type B	5	✓		
Type C	3		✓	✓

A merchant sells three types of clocks that chime as indicated by the check marks in the table above. What is the total number of chimes of the inventory of clocks in the 90-minute period from 7:15 to 8:45 ?

5., 6.

Number of Donuts	Total Price
1	\$0.40
Box of 6	\$1.89
Box of 12	\$3.59

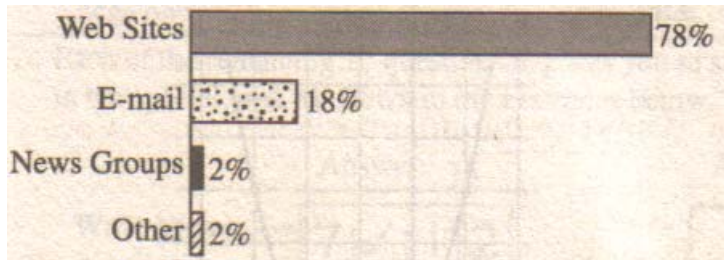
Of the following, which is the closest approximation of the cost per donut when one purchases a box of 6 ?

- (A) \$0.20
- (B) \$0.30
- (C) \$0.40
- (D) \$0.50
- (E) \$0.60

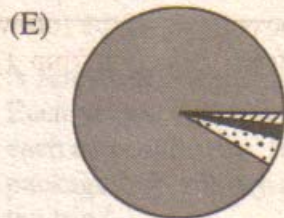
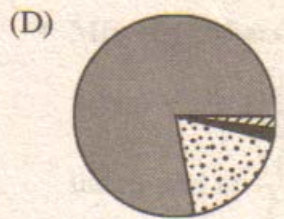
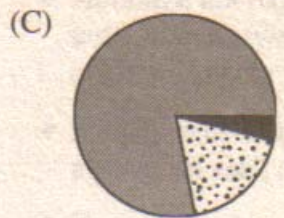
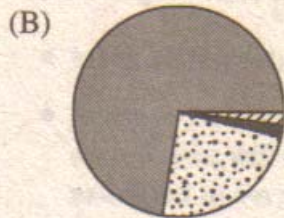
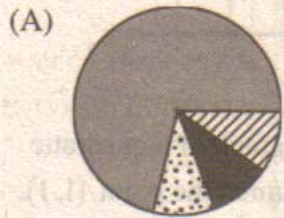
What would be the least amount of money needed to purchase exactly 21 donuts?

- (A) \$5.88
- (B) \$6.68
- (C) \$7.19
- (D) \$7.38
- (E) \$8.40

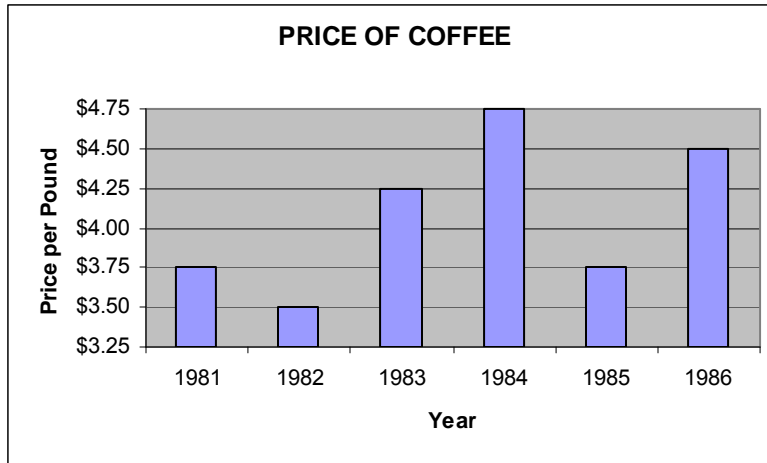
7.



The bar graph above shows where fraud is committed on the Internet. Which of the following circle graphs most accurately displays the same data?



8.



According to the graph above, between which two consecutive years was there the greatest change in the price of coffee?

- (A) 1981 and 1982
- (B) 1982 and 1983
- (C) 1983 and 1984
- (D) 1984 and 1985
- (E) 1985 and 1986

9.

**BRIDGETON VOTER REGISTRATION DATA**

	Voting-Age Population	Number of Registered Voters
Men	1,200	1,000
Women	1,300	1,200

The table above gives the voter registration data for the town of Bridgeton at the time of a recent election. In the election, 40 percent of the voting-age population actually voted. If the turnout for an election is defined to be the fraction

$$\frac{\text{number who actually voted}}{\text{number of registered voters}},$$

what was the turnout for this election?

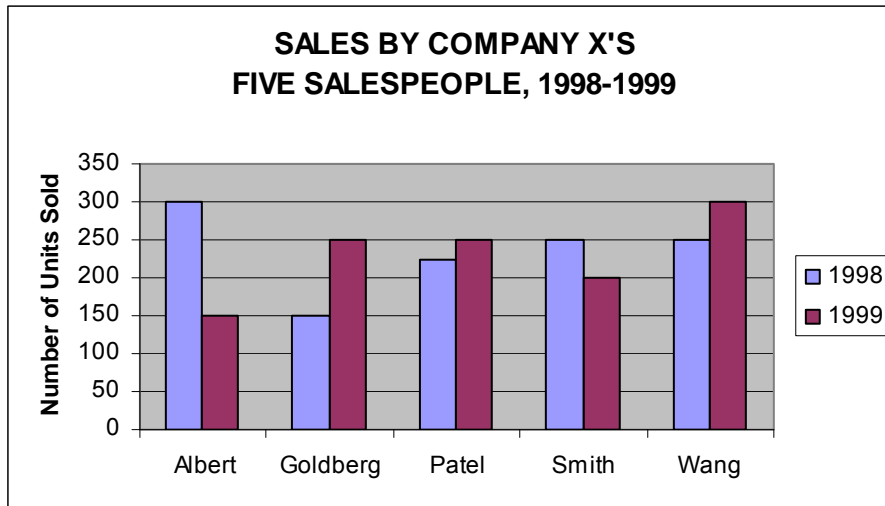
10.

**OUTDOOR SNEAKER COMPANY'S  
JULY PRODUCTION**

	High-tops	Low-tops	Total
White	3,600		
Black		1,500	
Total		5,500	10,000

Outdoor Sneaker Company manufactures only white sneakers and black sneakers, both of which are available as either high-tops or low-tops. On the basis of the information in the table above, how many black sneakers did Outdoor Sneaker Company manufacture in July?

11.

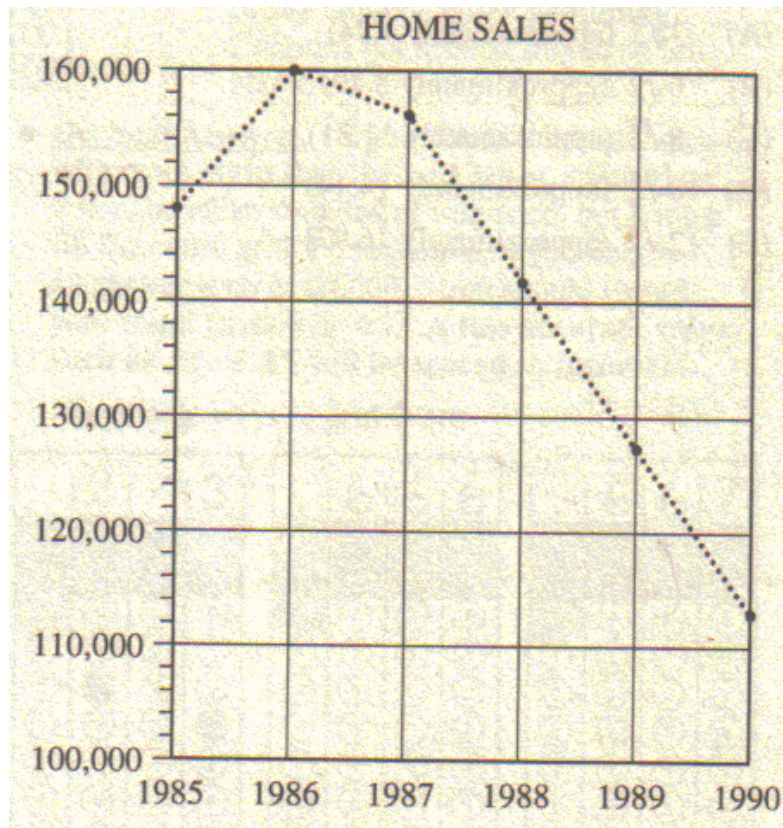


According to the graph above, which salesperson had the greatest increase in the number of units sold from 1998 to 1999 ?

- (A) Albert
- (B) Goldberg
- (C) Patel
- (D) Smith
- (E) Wang



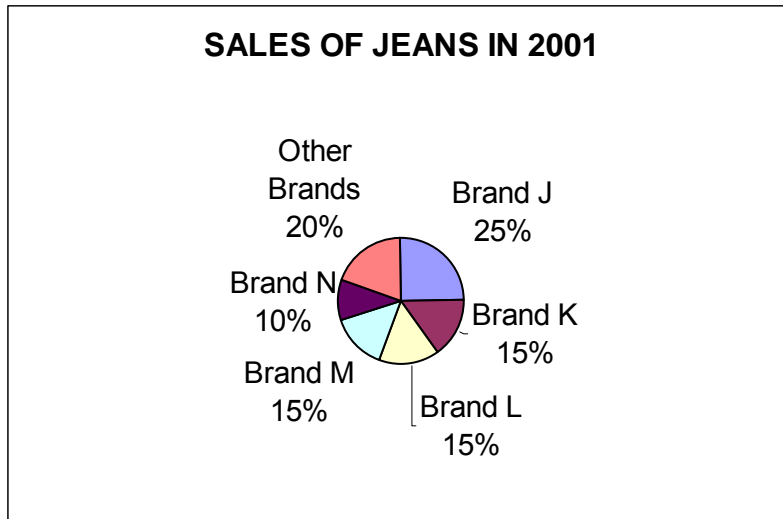
12.



According to the graph above, which of the following is closest to the decrease per year in the number of homes sold between 1987 and 1990 ?

- (A) 7,000
- (B) 11,500
- (C) 14,000
- (D) 17,500
- (E) 42,000

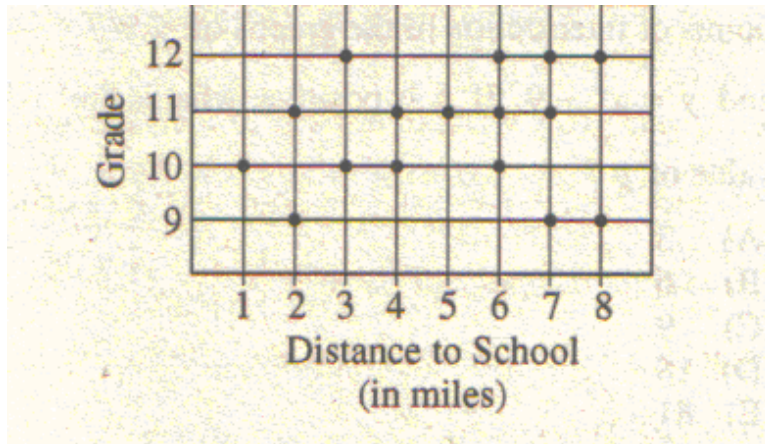
13.



The circle graph above represents all the jeans that were sold by a retail store in 2001, according to their brands. If the store sold 900 pairs of jeans other than brands *J*, *K*, *L*, *M*, and *N*, how many pairs of jeans did it sell altogether?

- (A) 1,500
- (B) 2,250
- (C) 3,000
- (D) 3,600
- (E) 4,500

14.



The results of a survey of 16 students at Thompson High School are given in the grid above. It shows the distance, to the nearest mile, that students at various grade levels travel to school. According to this grid, which of the following is true?

- (A) There is only one student who travels 2 miles to school.
- (B) Half of the students travel less than 4 miles to school.
- (C) More 12th graders than 11th graders travel 6 or more miles to school.
- (D) The students who travel less than 3 miles to school are all 12th graders.
- (E) Of the students who travel 7 or more miles to school, half are 9th graders.

15.

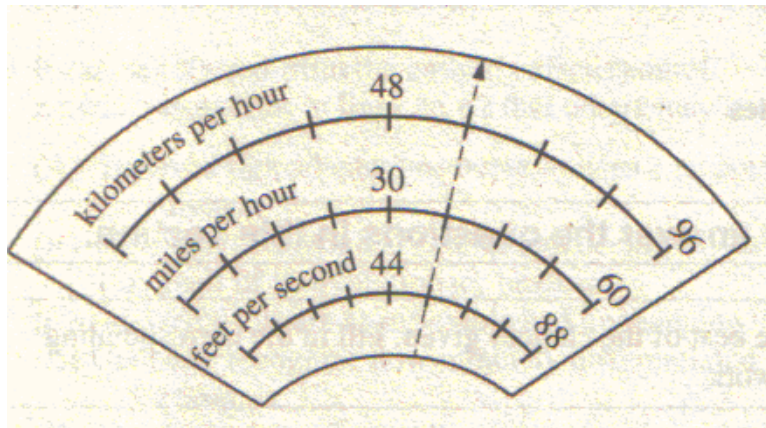
**RATINGS OF CAR ENGINE OIL**

Rating	Relative Speed of Flow
10W	Half as fast as 5W oil
15W	Half as fast as 10W oil
20W	Half as fast as 15W oil

According to the table above, car engine oil with a rating of 5W flows how many times as fast as car engine oil with a rating of 20W?

- (A) 2
- (B) 4
- (C) 8
- (D) 16
- (E) 32

16.



On the speedometer above, what is the speed, in miles per hour, indicated by the needle position?

- (A) 32.5
- (B) 37.5
- (C) 40
- (D) 55
- (E) 60

17.

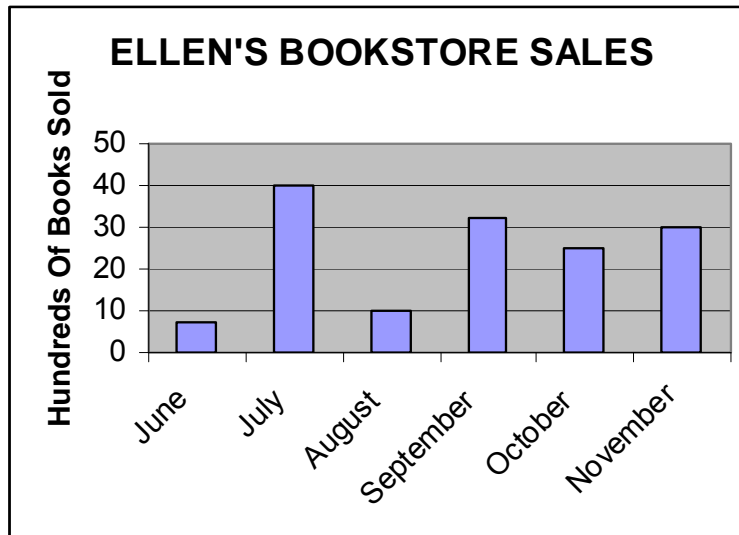
**STUDENTS IN AN ADVANCED BIOLOGY CLASS**

	Juniors	Seniors	Total
Boys	$k$	$n$	$m$
Girls	$r$	$s$	$t$
Total	$w$	$x$	$z$

In the table above, each letter represents the number of students in that category. Which of the following must be equal to  $z$  ?

- (A)  $k + s$
- (B)  $m + x$
- (C)  $r + s$
- (D)  $r + s + t$
- (E)  $k + n + r + s$

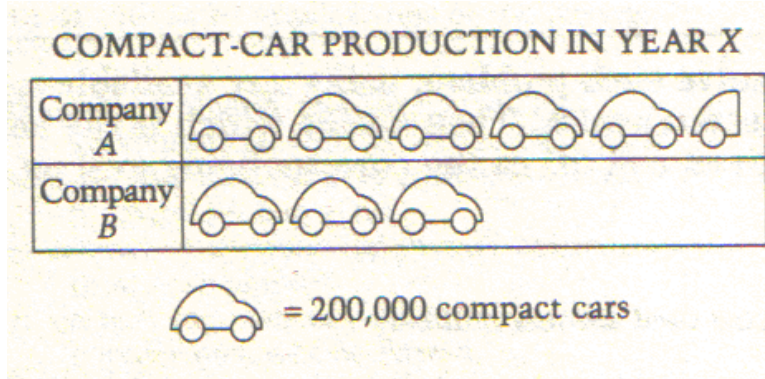
18.



According to the graph above, during which of the following two-month periods did Ellen's Bookstore sell the least number of books?

- (A) June and July
- (B) July and August
- (C) August and September
- (D) September and October
- (E) October and November

19.



According to the chart above, Company A produced approximately how many more compact cars in year X than Company B did?

- (A) 200,000
- (B) 250,000
- (C) 300,000
- (D) 400,000
- (E) 500,000

20.

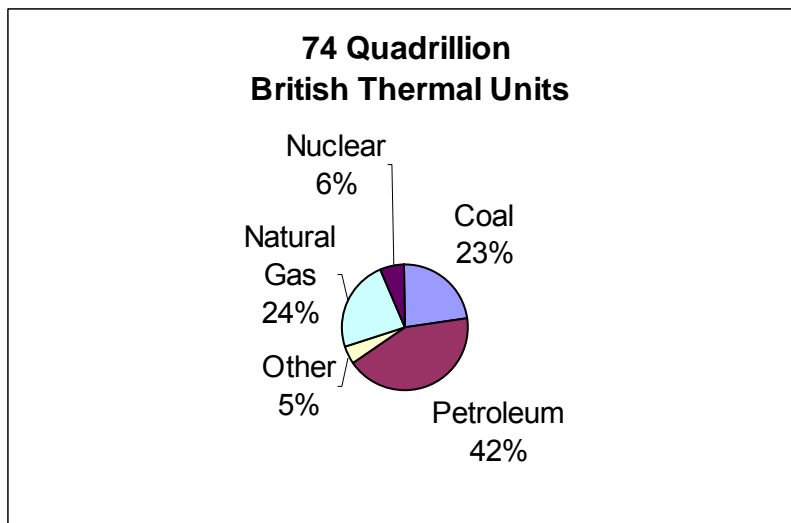
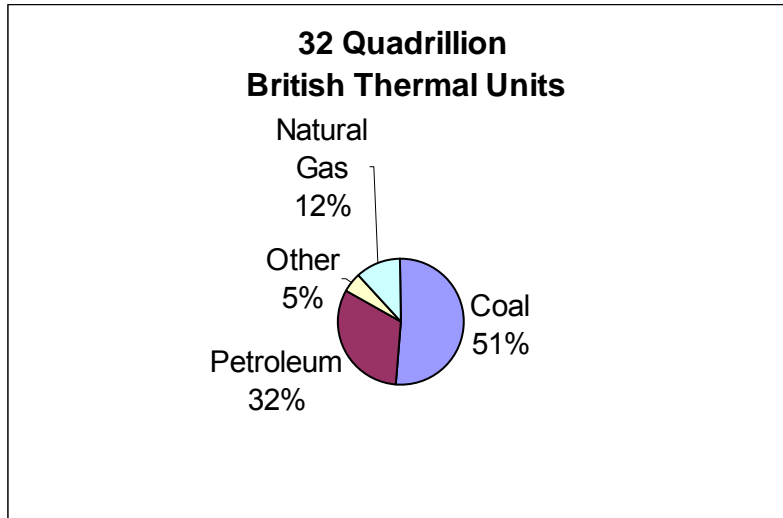
	Column1	Column 2	Total
Row 1			53
Row 2			26
Row 3			21
Total	36	64	100

In the table above, each of the six empty boxes should contain a number entry so that the column and row totals are as given. Juan wants to complete the table. What is the least number of entries that he must ask for in order to complete the table?

- (A) One
- (B) Two
- (C) Three
- (D) Four
- (E) Six

21.

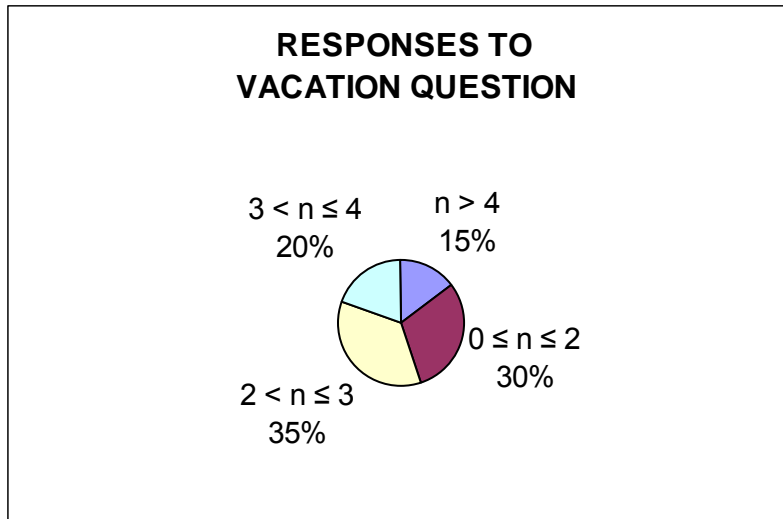
TOTAL ENERGY CONSUMED IN THE UNITED STATES IN 1945 AND IN 1985



According to the graphs above, for which energy source was the actual amount of energy consumed, in British thermal units, nearly the same in 1985 as in 1945 ?

- (A) Coal
- (B) Natural gas
- (C) Petroleum
- (D) Nuclear
- (E) Other

22.



In a survey of 3,600 people, one question asked was the following: "How many weeks of vacation did you take last year?" All but 200 of the people surveyed answered the question, and their responses to the question are summarized in the chart above, where  $n$  equals the number of vacation weeks cited. How many respondents took more than 2 weeks of vacation?

23.

MAPLE AVENUE TREES	
Number of Trees	Trimming Time per Tree
7	20 minutes
8	40 minutes
10	80 minutes
15	100 minutes

How many hours will it take to trim all 40 trees listed in the table above?



24.

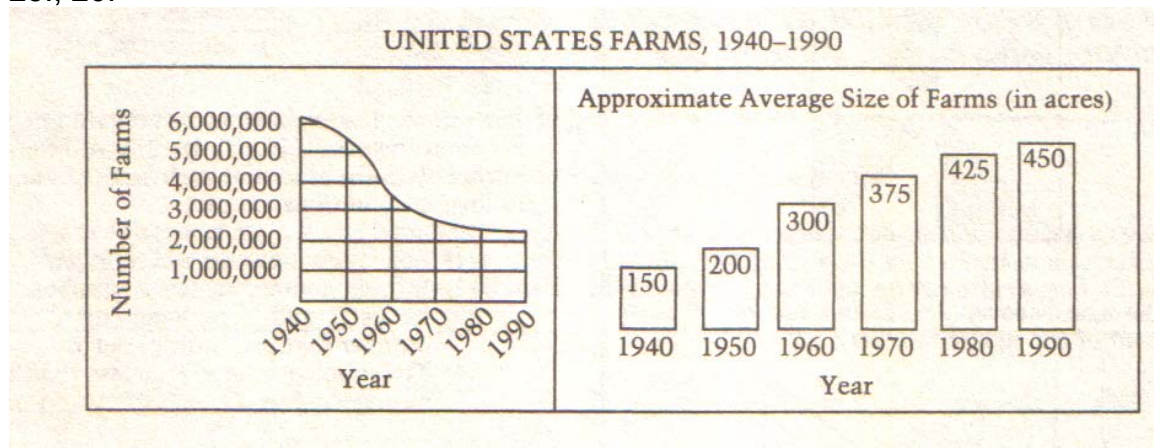
WORKDAY ABSENCES AT EMPIRE PROCESSING PLANT

Month	1994	1995
January	18	12
February	22	16
March	19	16
April	20	12
May	21	14

According to the table above, what was the total decrease from 1994 to 1995 in workday absences for the months shown?

- (A) 31
- (B) 30
- (C) 29
- (D) 28
- (E) 26

25., 26.



Which of the following is NOT a valid conclusion from the information shown in the graphs?

- (A) From 1950 to 1960, the number of farms decreased by approximately 2,000,000.
- (B) From 1940 to 1990, the number of farms decreased.
- (C) From 1940 to 1990, the average size of farms increased each decade.
- (D) In 1980, there were about 2,500,000 farms.
- (E) From 1950 to 1960, the average size of farms increased by approximately 100%.

According to the graphs, which of the following is the best estimate of the total acreage of farms in 1950?

- (A) 200,000
- (B) 1,100,000
- (C) 5,500,000
- (D) 1,100,000,000
- (E) 11,000,000,000

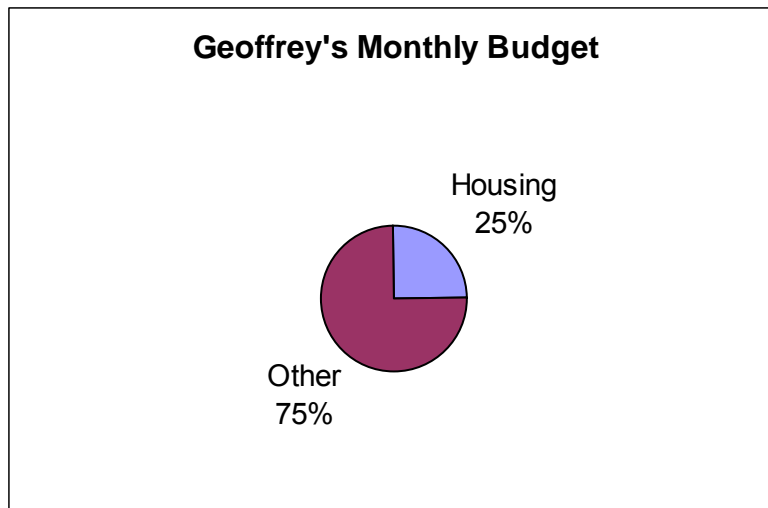
27.

Product	Number of People Choosing Product
W	37
X	51
Y	$m$
Z	$n$

The table above shows the results of a survey of 200 people in which each person chose exactly 1 out of 4 products. If  $m$  and  $n$  are positive integers, what is the greatest possible value of  $n$ ?

- (A) 12
- (B) 56
- (C) 111
- (D) 112
- (E) 200

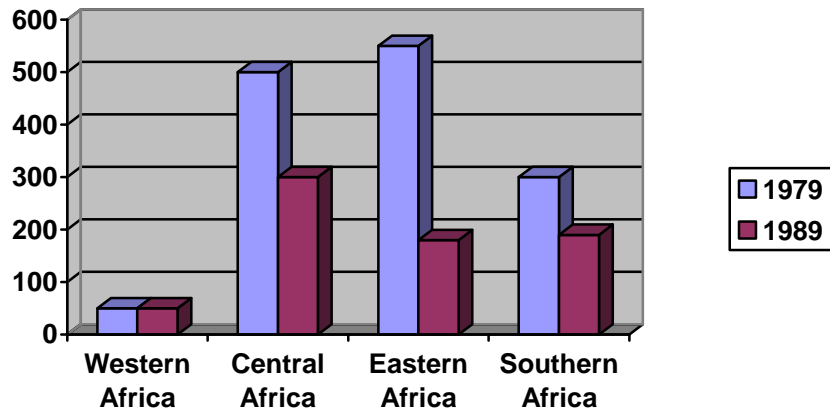
28.



On the basis of the information in the graph above, if Geoffrey's monthly housing budget is \$650, what is the dollar amount of his total monthly budget? (Disregard the \$ sign when gridding your answer.)

29., 30.

Elephant Population in Selected Regions in Africa  
(in thousands)



Which of the following regions in Africa had an elephant population in 1989 that was approximately  $\frac{1}{3}$  of its elephant population in 1979 ?

- I. Central
- II. Eastern
- III. Southern

- (A) I only
- (B) II only
- (C) III only
- (D) I and III only
- (E) I, II, and III

From 1979 to 1989, the total elephant population in the four regions of Africa decreased by approximately what percent?

- (A) 10%
- (B) 30%
- (C) 50%
- (D) 70%
- (E) 90%

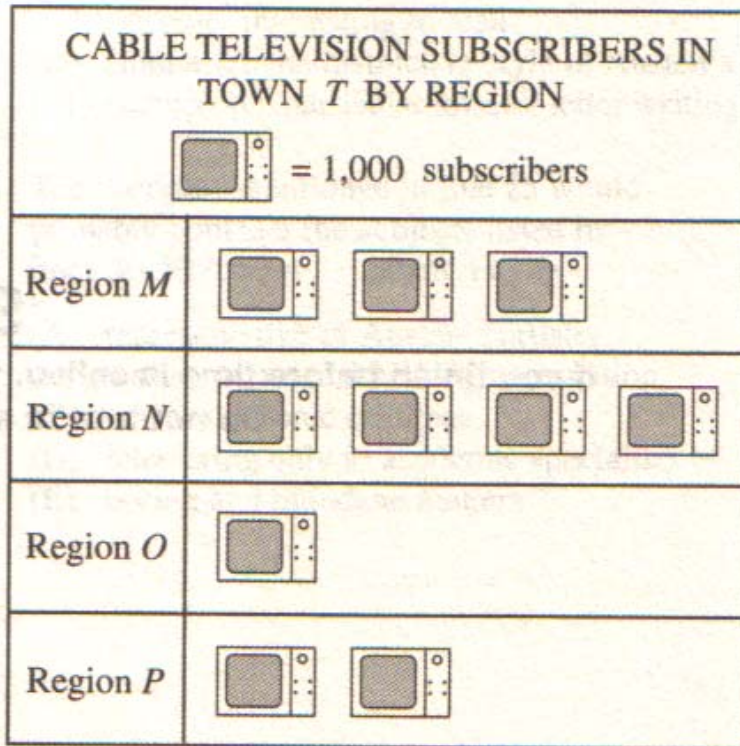
31.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
<i>a</i>	0	4	7	8
<i>b</i>	--	0	3	4
<i>c</i>	--	--	0	1
<i>d</i>	--	--	--	0

The table above shows the results of subtracting the numbers  $a$ ,  $b$ ,  $c$ , and  $d$  from each other. Each number in the body of the table gives the difference when the number at the far left of the table is subtracted from the number at the top of the table. For example,  $d - a = 8$ . If  $c = 20$ , what is the value of  $a + b + c + d$ ?

- (A) 63
- (B) 65
- (C) 67
- (D) 69
- (E) 71

32.



If the four regions shown in the graph above are the only regions in Town *T*, the total of which two regions accounts for exactly 70 percent of all cable television subscribers in Town *T*?

- (A) Regions *M* and *N*
- (B) Regions *M* and *O*
- (C) Regions *N* and *O*
- (D) Regions *N* and *P*
- (E) Regions *O* and *P*


33.

Event	Beginning Time	Ending Time
Session I	?	
Break		
Session II		
Lunch		
Session III		
Break		
Session IV		4:30 P.M.

In the schedule above, each session is to be  $1\frac{1}{2}$  hours long, each break is to be  $\frac{1}{4}$  hour long, and lunch is to be 1 hour long. If session IV is to end at 4:30 P.M., at what time should session I begin?

- (A) 8:15 A.M.
- (B) 8:30 A.M.
- (C) 8:45 A.M.
- (D) 9:00 A.M.
- (E) 9:15 A.M.

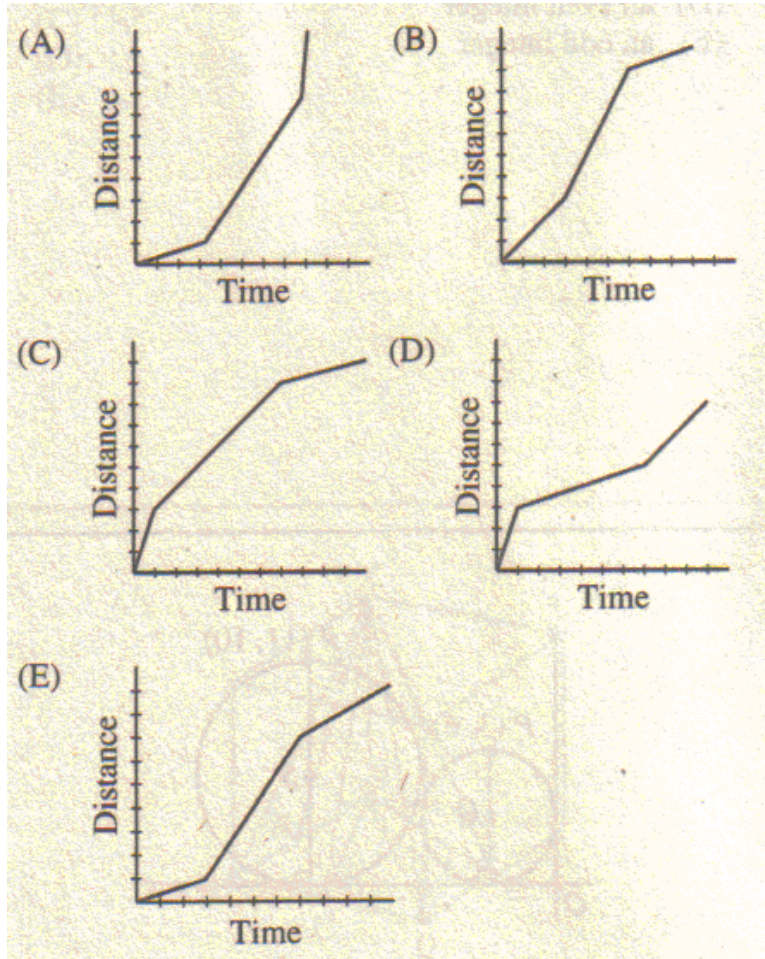
34.

The legend of a certain pictograph shows  = 5 million new homes. Approximately how many new homes are represented by the symbols



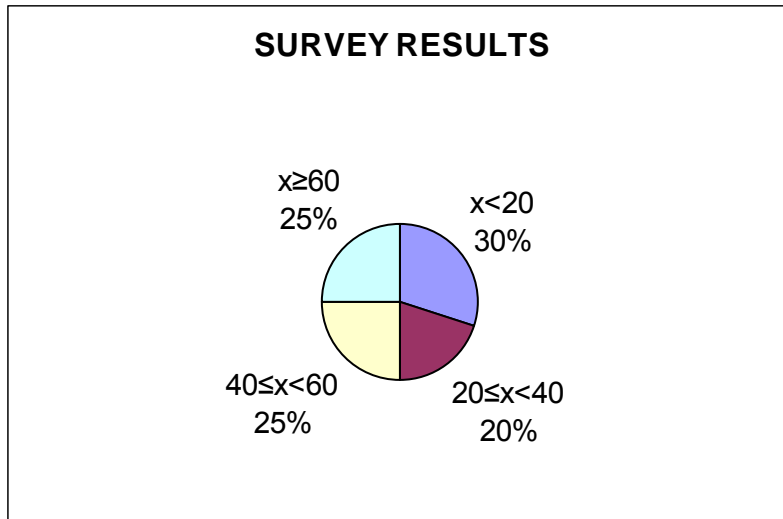
- (A) 3.5 million
- (B) 10.5 million
- (C) 15.5 million
- (D) 17.5 million
- (E) 35 million

35. Josephine's daily exercise routine consists of swimming, cycling, and running, in that order. She runs faster than she swims and cycles faster than she runs. If she does not rest between the activities, which of the following could be the graph of the distance she covers during the entire time of her exercise routine?





36.



The chart above shows the results when 1,000 people were asked, "How old are you?" The age they gave is represented by  $x$ . How many people said that their age was less than 40 ?

- (A) 200
- (B) 300
- (C) 450
- (D) 500
- (E) 550

37., 38.

Price of Game Q	Projected Number of Games Sold
\$50	50,000
\$30	100,000
\$10	150,000

Based on the projections, how much more money would be received from sales of game Q when the price is \$30 than when the price is \$50 ?

- (A) \$50,000
- (B) \$100,000
- (C) \$500,000
- (D) \$1,000,000
- (E) \$2,750,000

Which of the following graphs best represents the relationship between the price of game Q and the projected number of games sold, as indicated by the table?

