

*The table at right shows the percentile distribution of SAT Math scores among a sample of students enrolled in MGF1106 during Fall, 1999.*

Math SAT	Percentile
660	94
590	84
540	64
510	41
480	23
440	7

**24.** Approximately what percent of students had scores between 440 and 510?

- A. 41    B. 23    C. 7    D. 34

**25.** What percent of students had scores greater than 590?

- A. 84    B. 94    C. 16    D. 6

#### **ANSWERS TO PRACTICE EXERCISES**

- 1.** True    **2.** False    **3.** False    **4.** False    **5.** D    **6.** C  
**7.** A    **8.** D    **9.** C    **10.** B    **11.** A    **12.** A  
**13.** D    **14.** D    **15.** A    **16.** D    **17.** C    **18.** A  
**19.** D    **20.** B    **21.** B    **22.** B    **23.** D    **24.** D  
**25.** C

The table at right shows the percentile distribution of professional wrestlers according to weight (pounds).

Weight	Percentile
450	98
350	85
300	50
275	40
250	30
235	25

**18.** Approximately what percent of wrestlers weigh between 300 and 450 pounds?

- A. 48    B. 85    C. 233    D. 35

**19.** What percent of wrestlers weigh less than 275 pounds?

- A. 55    B. 60    C. 45    D. 40

**20.** What percent of wrestlers weigh 450 pounds or more?

- A. 98    B. 2    C. 198    D. 15

The table at right shows the percentile distribution of final exam scores for MGF1106 Sections 01-08, Spring 1999. Refer to it for exercises 21 - 23.

Score	Percentile
100	99
90	86
80	63
73	39
65	25
55	14

**21.** What percent of students had scores less than 80?

- A. 78    B. 63    C. 37    D. 39

**22.** Approximately what percent of students had scores between 65 and 80?

- A. 88    B. 38    C. 39    D. 64

**23.** What percent of students had scores greater than 90?

- A. 99    B. 86    C. 10    D. 14

**10.** What percent weren't Presbyterian?  
A. 96.0%    B. 85.7%    C. 14.7%    D. 4.0%

**11.** Last year, Gog the cave man owned 44 stones and 11 sticks. This year, Gog the cave man owns 39 stones and 42 sticks. Find the percent decrease in stones.  
A. 11.36%    B. 112.82%    C. 88.64%    D. 45.45%

**12.** Last year, Dorothy owned 143 ear rings and 79 nose rings. This year, Dorothy owns 41 ear rings and 150 nose rings. Find the percent increase in nose rings.  
A. 89.87%    B. 71.33%    C. 47.33%    D. 147.06%

**13.** Last year, Dan owned 113 vinyl LP records. This year, Dan's supply of vinyl LP records has increased by approximately 67%. How many vinyl LP records does Dan have now?  
A. 76    B. 7571    C. 180    D. 189

**14.** Last year, Socrates owned 574 Pokemon cards. This year, Socrates's supply of Pokemon cards has decreased by approximately 32%. How many Pokemon cards does Socrates have now?  
A. 184    B. 18368    C. 542    D. 390

*The table at right shows the percentile distribution of people according to IQ. Refer to it for exercises 15 - 17.*

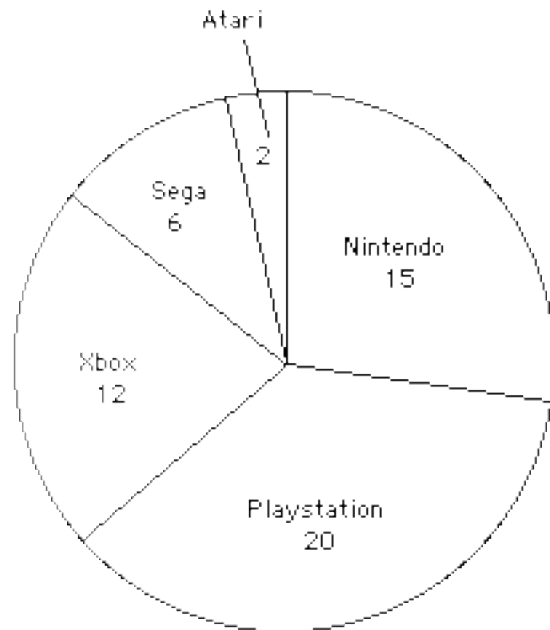
IQ	Percentile
145	99
130	97
115	84
101	50
85	16
70	4
55	1

**15.** What percent of people have IQs less than 85?  
A. 16    B. 5    C. 4    D. 21

**16.** What percent of people have IQs of 130 or more?  
A. 99    B. 97    C. 196    D. 3

**17.** Approximately what percent of people have IQs between 101 and 130?  
A. 147    B. 50    C. 47    D. 84

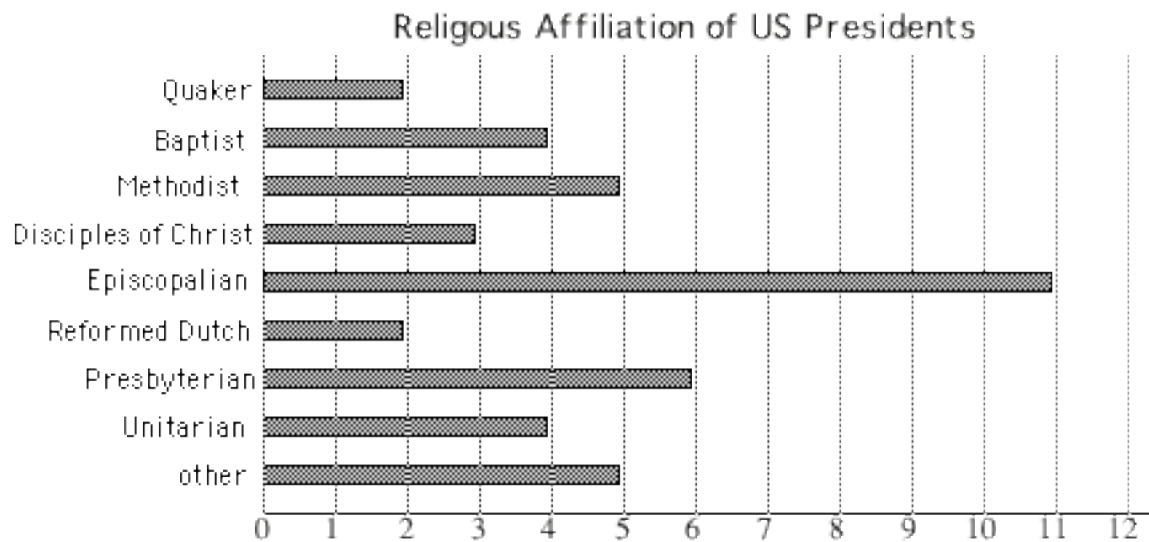
7 – 8: A number of couch potatoes were asked “What is the most important thing in the



universe?” Their responses are summarized in the pie chart below.

7. What percent said “Playstation?”  
A. 36.4%    B. 20%    C. 80%    D. 63.6%
8. What percent didn’t say “Xbox?”  
A. 12.0%    B. 88.0%    C. 21.8%    D. 78.2%

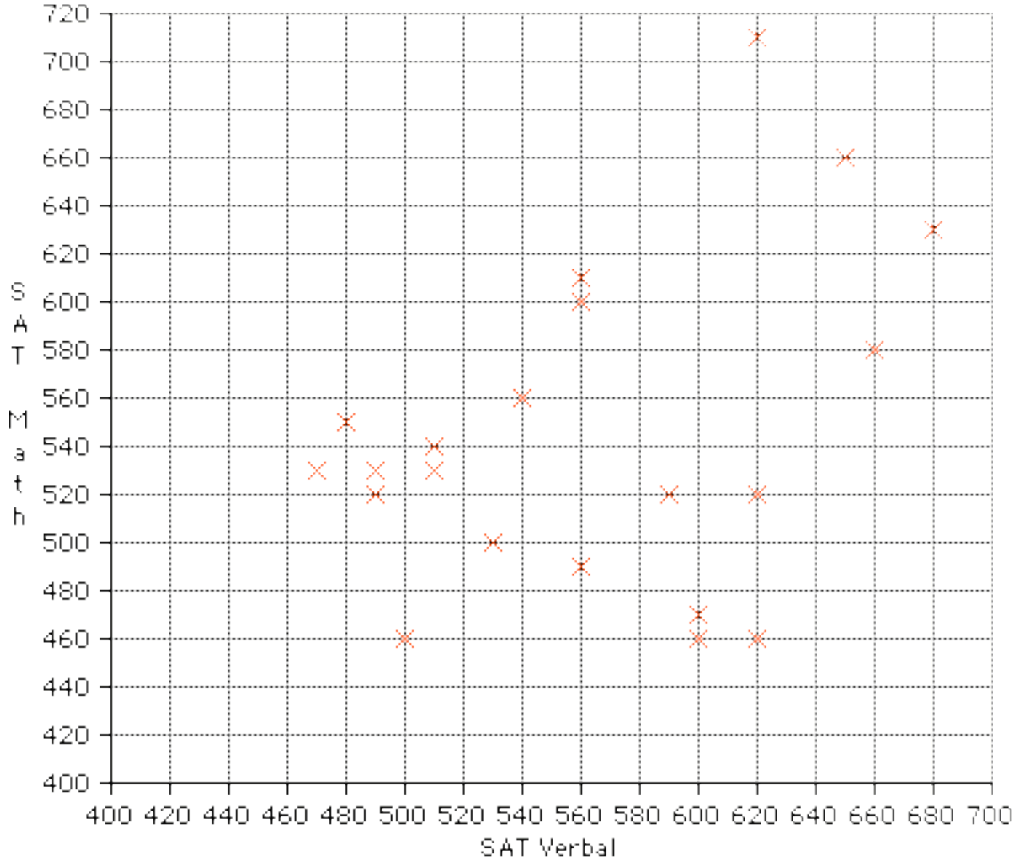
9 - 10: Refer to the bar graph below, showing the religious affiliations of US presidents.



9. What percent of US presidents were Unitarian?  
A. 4.0%    B. 40.0%    C. 9.5%    D. 95%

## PRACTICE EXERCISES

**1 - 6:** The scatter diagram below shows the relationship between SAT Math score and SAT Verbal score for a number of students in MGF1106.



1. True or false: Increased verbal scores tend to be associated with increased math scores.
2. True or false: Higher math scores tend to be associated with lower verbal scores.
3. True or false: Lower math scores tend to cause lower verbal scores.
4. True or false: The person with the highest math score had a verbal score of 460.
5. Find the highest math score for a person whose verbal score was less than 620.  
A. 470      B. 520      C. 570      D. 610
6. Find the lowest verbal score for a person whose math score was at least 580.  
A. 600      B. 610      C. 560      D. 660