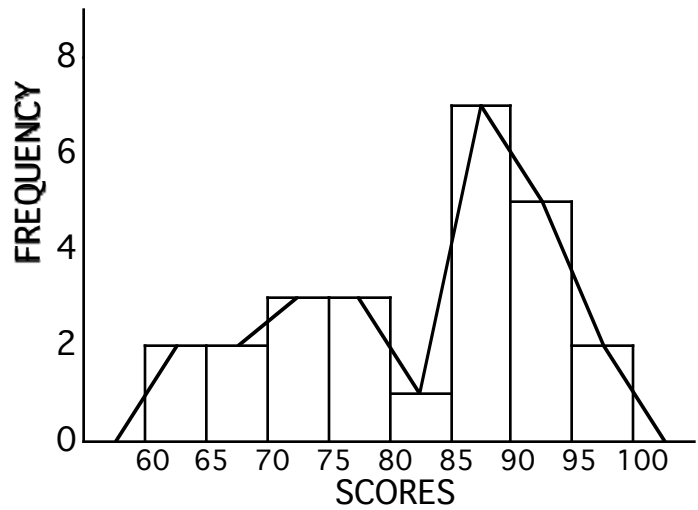


CHAPTER 12, TEST A

1. No. Only the students in the Physics Department have a chance of being selected.

SCORE	TALLY	FREQ
$60 \leq S < 65$		2
$65 \leq S < 70$		2
$70 \leq S < 75$		3
$75 \leq S < 80$		3
$80 \leq S < 85$		1
$85 \leq S < 90$		7
$90 \leq S < 95$		5
$95 \leq S < 100$		2

3a and 3b.



4. (a) 30°F (b) 28°F (c) 28°F

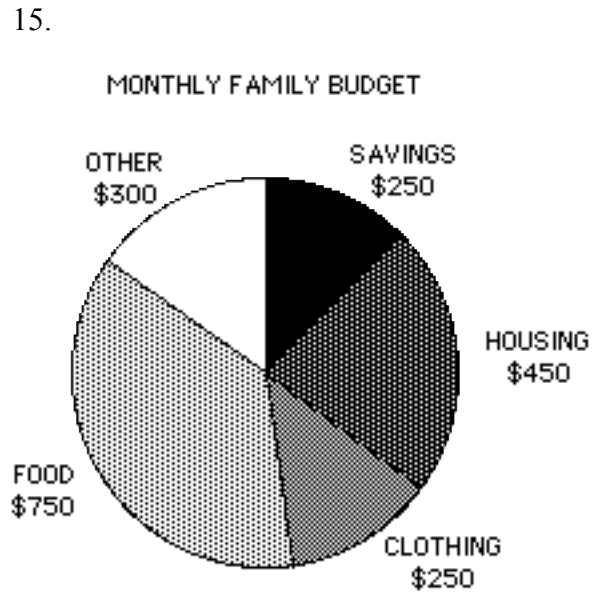
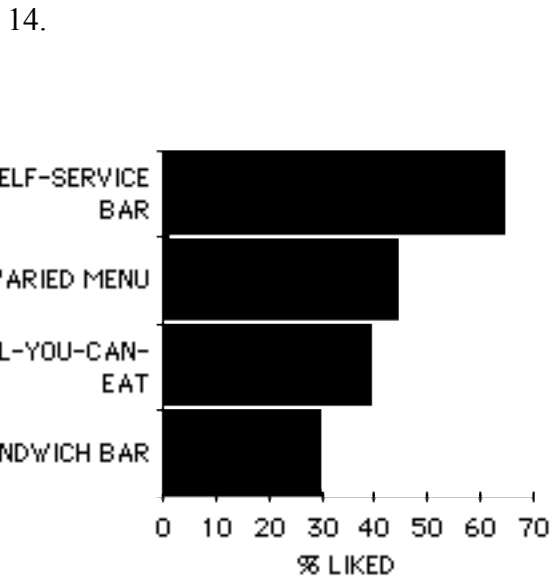
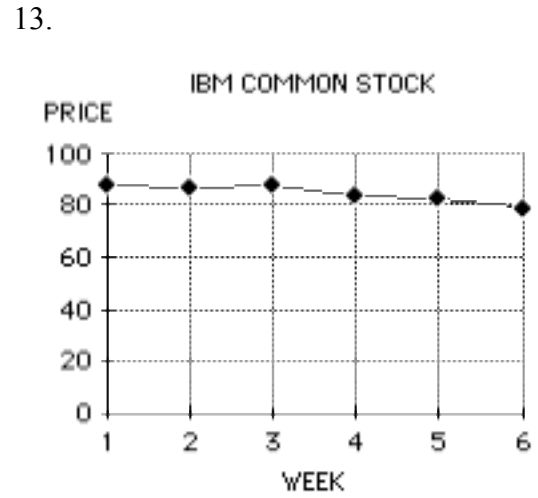
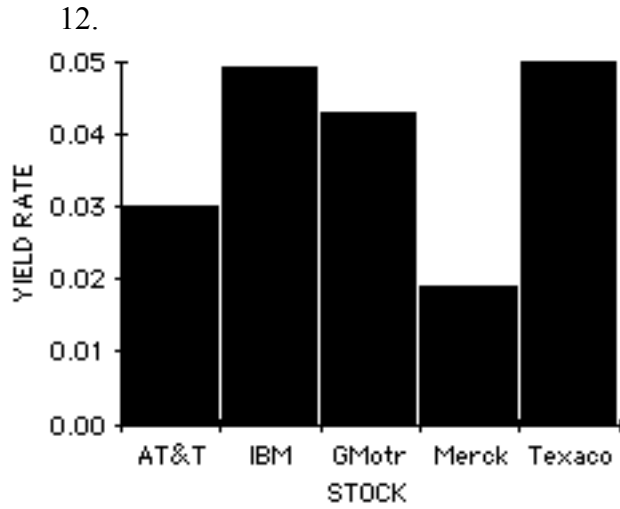
5. (a) 20°F (b) $\sqrt{\frac{163}{3}} \approx 7.37$

6. (a) 35 and 65 (b) 0.16 7. (a) 25 (b) 160 (c) 135

8. (a) 0.5 (b) 0.025 9. (a) 1 (b) 1.6

10. Neither. They correspond to the same z-score

11. 0.341



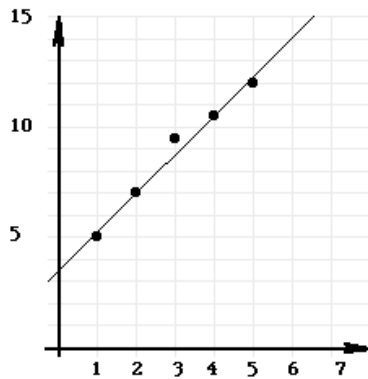
16. 20%

17. 200

18. 8

19. (a) Zero (b) Negative (c) Negative (d) Positive

20. For $x = 6$, $y \approx 14$



21. $y = 1.75x + 3.55$

22. $y = 1.75(6) + 3.55 \approx 14$

23. $r \approx 0.989$

24. We can be 99% confident that there is a significant linear correlation between the variables x and y

25. Since $n = 5$, that value is 0.878

CHAPTER 12, TEST B

1. (a) 2. (d) 3. (b) 4. (d) 5. (d) 6. (c)

7. (c) 8. (b) 9. (c) 10. (d) 11. (e) 12. (b)

13. (b) 14. (e) 15. (c) 16. (c) 17. (d) 18. (b)

19. (e) 20. (e) 21. (c) 22. (b) 23. (c) 24. (d) 25. (b)