

Studyguide Answer Key

1.

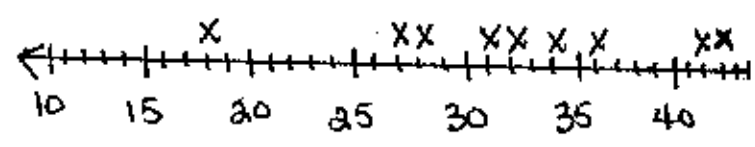
Points	Tally	Frequency	Cumulative Frequency
10-19		1	1
20-29		2	3
30-39		4	7
40-49		3	10

2.

1		8
2		7 8
3		1 2 4 6
4		2 3 6

4|2 means 42

3.



4.

13, 8, 40, 19, 5, 8
 5, 8, 8, 13, 19, 40
 $21 \div 2 = 10.5$

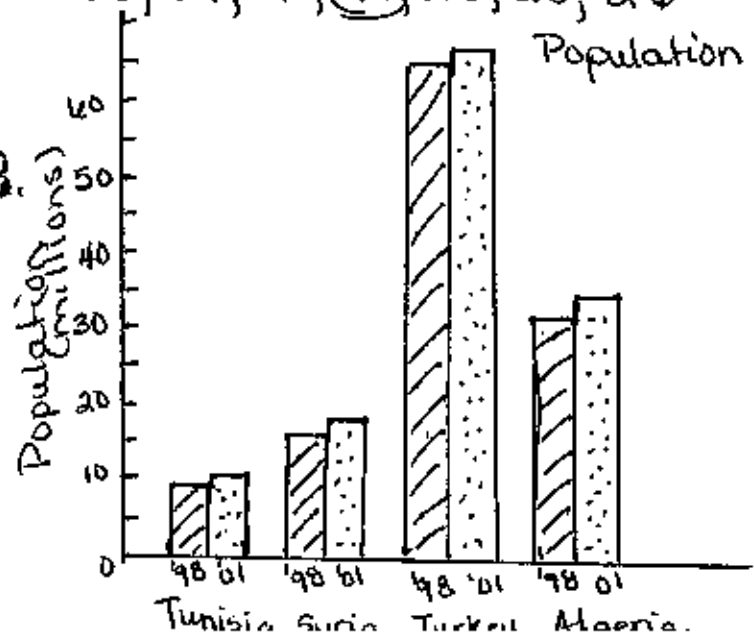
Mean (Avg.) Sum $\rightarrow 93 \div 6 = 15.5$
 Median (middle #) 10.5
 Mode 8 (most often)

5.

21, 19, 23, 26, 15, 25, 25
 15, 19, 21, 23, 25, 25, 26

Mean Sum $\rightarrow 154 \div 7 = 22$
 Median 23
 Mode 25

6.



▨ 1998
 ▩ 2001

6. 19, 21, 22, 23, 25, 27, 31, 36
 Med. 24
 Mean 28
 Mode no mode
 Sum $224 \div 8$

outlier 36

Mean w/ outlier - 24
 Sum $156 \div 7$

Median 23
 Mode - none

7. 57, 59, 66, 66, 78, 84, 87, 239
 outlier

Mean 92
 Sum $736 \div 8$

Median 72
 $\frac{66 + 78}{2}$

Mode 66

Mean w/outlier - 71
 Sum $497 \div 7$

Median 66

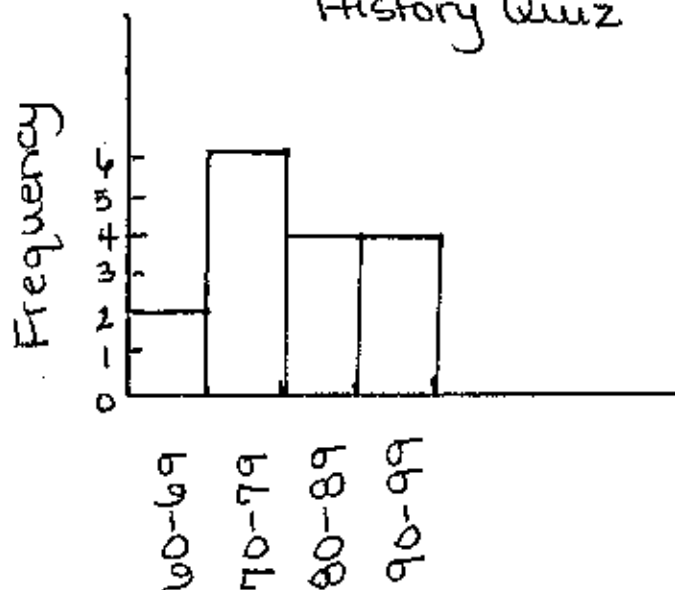
Mode 66

9. 64, 69, 75, 76, 77, 78, 78, 79, 83, 87, 88, 88, 92, 93, 96, 99

64-99

	Tally	Freq.
60-69		2
70-79		6
80-89		4
90-99		4

History Quiz



10. Azeri

11. 50%

12. $.03 \times 100 =$
3



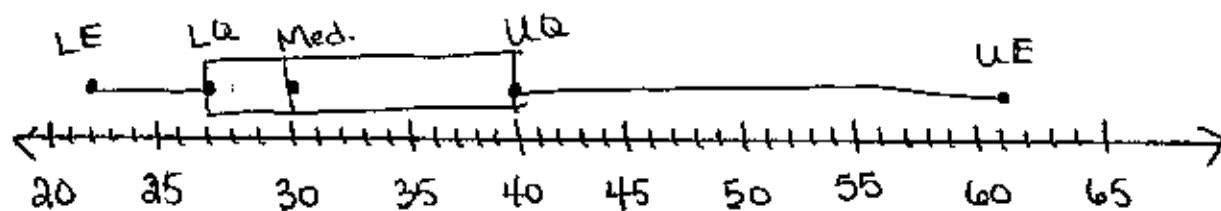
Grades

13. circle graph

14. bar graph

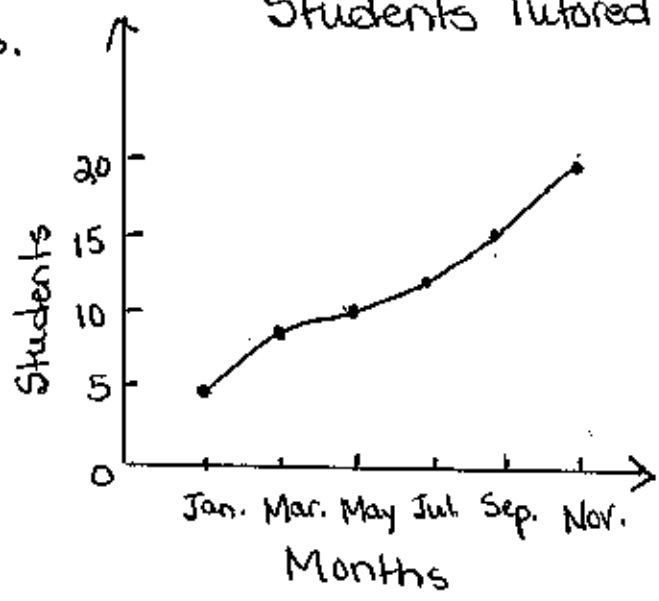
15. 22, 25, ~~26~~, 27, 28, 29, 30, 32, 39, 40, 41, 61

↓ LE
↓ LQ
Med.
↓ UQ
↓ UE



16.

Students Tutored by Karen



17. Oct. About 16

18. line graph (shows change over time)

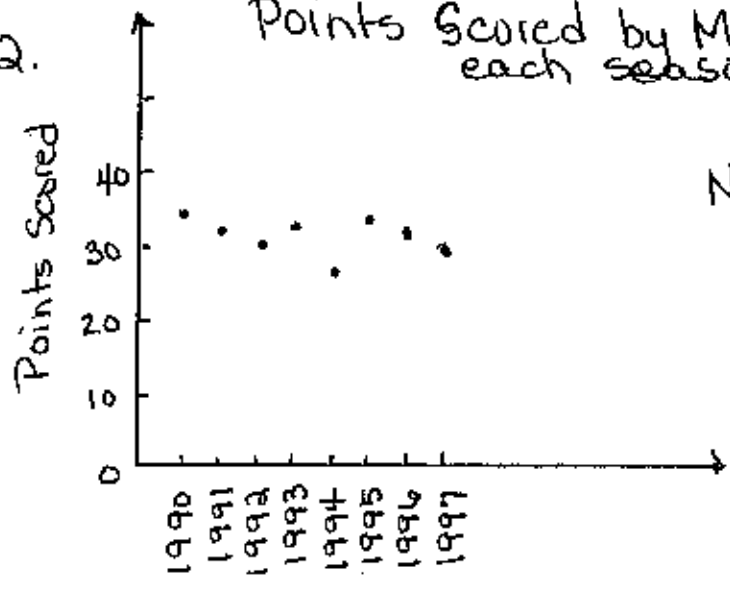
19. bar graph

20. biased

21. random

22.

Points Scored by Michael Jordan each season w/ Chicago Bulls



Negative Relationship

23. Broken scale

24. Break in scale

Studyguide Key

$$\begin{aligned} 1. \quad & 5(2 + 3 \cdot 4) \div (2 \cdot 6 - 7) \\ & 5(2 + 12) \div (2 \cdot 6 - 7) \\ & 5(14) \div (2 \cdot 6 - 7) \\ & 5(14) \div (12 - 7) \\ & 5(14) \div 5 \\ & 70 \div 5 \\ & \textcircled{14} \end{aligned}$$

$$\begin{aligned} 2. \quad & 10 + 2 \cdot 3 - 4 \\ & 10 + 6 - 4 \\ & 16 - 4 \\ & \textcircled{12} \end{aligned}$$

$$\begin{aligned} 3. \quad & 10(3 + 1) - 16 \div 4 \\ & 10(4) - 16 \div 4 \\ & 40 - 16 \div 4 \\ & 40 - 4 \\ & \textcircled{36} \end{aligned}$$

$$\begin{aligned} 4. \quad & \frac{24 - 16}{3} \\ & \frac{18}{3} \\ & \textcircled{6} \end{aligned}$$

$$\begin{aligned} 5. \quad & 6(5) + 4 \\ & 30 + 4 \\ & \textcircled{34} \end{aligned}$$

$$6. \quad 3^2 = \textcircled{9}$$

$$7. \quad 4^3 = 4 \cdot 4 \cdot 4 = \textcircled{64}$$

$$8. \quad 3^0 = \textcircled{1}$$

$$9. \quad 2^3 = 2 \cdot 2 \cdot 2 = \textcircled{8}$$

$$10. \quad 10^2 = 10 \cdot 10 = \textcircled{100}$$

11. The product of x and 15
 $\textcircled{15x}$

12. five times the sum of
 x and 4
 $\textcircled{5(x+4)}$

13. Six times the sum of x and 2

$$6(x + 2)$$

14. The difference of 4 times x and 9 is 27.

$$4x - 9 = 27$$

15. Fourteen less than c

$$c - 14$$

16. $2x^2 - y(y - z)$ $x = 3, y = 5, z = 2$

$$2 \cdot 3^2 - 5(5 - 2)$$

$$2 \cdot 9 - 5(3)$$

$$2 \cdot 9 - 5(3)$$

$$18 - 5(3)$$

$$18 - 15$$

$$(3)$$

17. $4a + b - 9$ $a = 9$ $b = 5$

$$4 \cdot 9 + 5 - 9$$

$$36 + 5 - 9$$

$$41 - 9$$

$$(32)$$

18. $cd - 5$ $c = 4$ $d = 8$

$$4 \cdot 8 - 5$$

$$32 - 5$$

$$(27)$$

19. $6x^2 + y(z - 3x)$ $x=2, y=5, z=15$

$6 \cdot 2^2 + 5(15 - 3 \cdot 2)$

$6 \cdot 2^2 + 5(15 - 6)$

$6 \cdot 2^2 + 5(9)$

$6 \cdot 4 + 5(9)$

$24 + 5(9)$

$24 + 45$

(69)

20. $a + 5b - c$

$8 + 5(3) - 10$

$8 + 15 - 10$

$23 - 10$

(13)

21. $11x - 4 - 7x$

$(11x - 7x) - 4$

$(4x - 4)$

22. $6x + 3x + 21 + 1x$

$(6x + 3x + 1x) + 21$

$(10x + 21)$

23. $22x - 8x - 3x - 1x$

$14x - 3x - 1x$

$11x - 1x$

$(10x)$

24. $4x + 18 + 30x + 16$

$(34x + 34)$

25. $16x - 8 - 7x - 5$

$(16x - 7x) + (8 - 5)$

$(9x + 3)$

26. $9(ab + 2) = 9(2 + ab)$

(Comm. Property)

27. $4(5 \cdot 8) = (4 \cdot 5) \cdot 8$

(Assoc. Prop.)

28. $0(7 + 9) = 0$

(Zero Prop.)

29. $c + 0 = c$

(Identity Prop.)

30. $3(4 + 1) = 3 \cdot 4 + 3 \cdot 1$

$(\text{Distributive Prop.})$

7-4

1. piano

2. About 25%

3. $.2 \times 8 = (16)$

1. vanilla

2. About 25%

3. $.2 \times 120 = (24)$

$$31. \quad 9(3+6) = 9(3) + 9(6)$$

$$32. \quad 4(x+5) = 4(x) + 4(5)$$

$$33. \quad 6(x+4) = 6(x) + 6(4)$$
$$\quad \quad \quad \textcircled{6x + 24}$$

$$34. \quad 2(5+6x) = 2(5) + 2(6x)$$
$$\quad \quad \quad \textcircled{10 + 12x}$$

$$35. \quad 5(3+7x) = 5(3) + 5(7x)$$
$$\quad \quad \quad \textcircled{15 + 35x}$$