

# Measures of Centrality Solutions

## 1 Mean—Median—Mode

1. (a) Two possible values  
(b)  $x = 3$
2. Median = 7 is the highest
3. (a) 35 k (low)  
(b) Mean = 121.3 k (distorted by extreme values)  
(c) Median = 65 k
4. (a) 14  
(b) 13  
(c) 24 or 1
5. 8
6. (a) 8.8  
(b) 8  
(c) 8  
(d) 10.5
7. To Be Shown
8. (a) 15.1  
(b) 7  
(c) 3  
(d) 31

The median is probably the best measure of average, because 61 is an extremely large data value and makes the mean artificially high.

9. To Be Shown
10. (a) 105  
(b) 110  
(c) 110

- (d) 97.5
- 11. To be shown
- 12. (a) 6.63
- (b) 6.45
- (c) none
- (d) 6.7

## 2 Tables

- 13. (a) 36
- (b) 31
- (c) 90
- (d) 30 – 40
- (e) 40 – 50
- 14. (a) 8
- (b) 30
- (c) discrete
- 15. (a)  $x = 6$
- 16. (a)  $x = 7$
- (b) *discrete*
- 17. (a) Almost perfectly symmetric.
- (b) mean=44.49g; median=45g
- 18. (a) 43.62mins
- (b) 16
- 19. (a) 96
- (b) 33.91 years
- (c) 25
- 20. (a) Continuous
- (b) TABLE
- (c) To be shown
- (d) Slightly skewed right
- (e) 34.25 degrees Celsius
- (f) 34.4 degrees Celsius
- (g) AMEND
- (h) AMEND

## 2.1 Mean, Median or Mode

21. (a) Mean or Median  
(b) Mode  
(c) Mean or Median  
(d) Mode  
(e) Median
22. (a) Mean  
(b) Mode  
(c) Median
23. (a) Categorical (nominal)  
(b) Mode
24. (a) Median  
(b) Not Really  
(c) Mean
25. Mean = 32.8 percent, Median = 18. I would use the median as the mean is raised in value by the outlier value of 188.