

Chapter 2 BLM Answers

BLM 2-2 Chapter 2 Warm-Up

Section 2.1

- 51, 58, 62, 63, 67, 70, 72, 75; 67, 70, 72, 75 are in the upper half.
- 2
- a) Estimate: $n = 15$; Calculate: $n = 18$
b) Estimate: $n = 45$; Calculate: $n = 40.5$
c) Estimate: $n = 110$; Calculate: $n = 112.5$
- 4.

Size	Tally	Frequency
5		2
6		2
7		3
8		6
9		3

5. a) $x = 2$ b) $y = 2$

Section 2.2

- size 8
- $n = 25$
- 47
- 2.1
- 72%

Section 2.3

- 12
- 60
- 23.5
- 62.4
- 55

BLM 2-3 Stem-and-Leaf Plots

- a) 5
- b)

Stem
5
6
7
8
9

- c)

Stem	Leaf
5	9 7 0
6	8 5 1 0 9 4
7	7 0 7 0
8	2 7 0
9	0 1

- d)

Stem	Leaf
5	0 7 9
6	0 1 4 5 8 9
7	0 0 7 7
8	0 2 7
9	0 1

2. a) 31 b) 47; 1 c) 26 d) 26

3. a) 3

- b)

Stem	Leaf
0	5 7 8 8 9 9
1	0 2 2 3 3 3 4 4 5 5 5 6 7 7 7 8
2	0 1 3 3 4

- c) 10-18 year olds d) 19 years
e) 13, 15, 17 f) 14

BLM 2-4 Section 2.1 Extra Practice

- a) mode = 47, median = 46.7, mean = 45.5
b) mode = 205, median = 203, mean = 205.7
c) mode = -5, median = -5, mean = -5
- a) mode = 31, median = 29.5
b) mode = 7, median = 7
- a) $n = 40$ b) $n = 40$
- a)

Size	Frequency
4	1
6	3
8	6
10	4
12	3
14	1

- b) Size 8
c) Yes. The mode shows the most popular size. It is also in the middle of the data set.

5. a)

Stem (tens)	Leaf (ones)
2	2 5 5 6 7 8 8
3	1 2

- b) 26 kg
c) 27.5 kg



6.

Value, x	Weighting, w (%)	Product of Value and Weighting, wx
63	40	$63 \times 0.4 = 25.2$
60	35	$60 \times 0.35 = 21$
52	15	$52 \times 0.15 = 7.8$
84	10	$84 \times 0.1 = 8.4$
Totals	100	62.4

7. a) grade 9 b) grade 7: 10; grade 8: 12; grade 9: 9; grade 10: 11; grade 11: 12; grade 12: 11

c) Grade 8 should win because they collected the most containers per student.

8. 37 h

9. a) 83, 81

b) Gerard's average = 90;

Mary's average = 86.5

BLM 2-5 Section 2.2 Extra Practice

1. a) range = 22; outliers are 31, 9

b) range = 14; outlier is -15

c) range = 13; outlier is 18

d) range = 1.5; outliers are 1.5, 3.0

2. a) mean = 20.5, trimmed mean = 20.6

b) mean = -5.5, trimmed mean = -4.9

c) mean = 9.4, trimmed mean = 8.9

d) mean = 2.21, trimmed mean = 2.2

3. a) 3

b) modes: 1.4, 1.5; median: 1.5; mean: 1.79

c) outlier: 4.1; The outlier should be removed because 4.1 lbs is not a typical weight, and it makes the average weight appear higher.

d) range: 0.9; median: 1.5; mean: 1.6

e) The median stayed the same; the mean decreased.

4. a) mean b) median c) trimmed mean

d) Example: The median represents the middle of the data set, so this is the best measure of central tendency to use in this case.

5. a) 50th = 19; 25th = 16; 75th = 21

b) 50th = 47; 25th = 41; 75th = 51

c) 50th = 15; 25th = 8; 75th = 21

d) 50th = 96; 25th = 88; 75th = 100.5

6. a) 50th = 24; 25th = 17; 75th = 33

b) 12 = 4th; 21 = 39th; 40 = 97th

7. a) 21 b) 33rd c) 89th d) 32

e) Glenn place third overall in the competition.

BLM 2-6 Section 2.3 Extra Practice

1. a) iv b) iii c) ii d) i

2. As time increases, the temperature decreases.

3. As the litres of gas pumped increases, the cost increases.

4. There is no trend.

5. a) As the temperature increases, the number of skaters increases.

b) There are very few skaters when the temperature is below -20°C . There are no skaters when the temperature is above 0°C .

6. a) As the number of icebergs sighted increases, the number of tourists visiting the chalet increases.

b) approximately 45 c) 10 or more

d) If the trend continues, you can extrapolate that about 60 tourists would visit the chalet if there were 15 icebergs sighted.

BLM 2-7 Chapter 2 Test

1. A

2. A

3. B

4. A

5. C

6. Caleb got his best scores on the project and the exam. These were worth more, so his weighted mean is higher than his mean. mean = 73%; weighted mean = 75.1%

7. a) mean = 6.9; median = 7.8;

mode = 7.8 b) 7.3 c) 0.8 d) 7.8

