

MATH GRADE 6

A. Short Answer (SA) 2 points

Mean:

Standard:

Strand:
Content Standard:
Benchmark:

Amelia recorded the number of minutes she spend exercising each day for 17 days in a table as shown below.

Amelia's Exercise

30	32	46	37	22	50
45	39	29	40	28	52
47	40	51	26	58	

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- A. In the space provided, create a stem-and-leaf plot that represents these data. Be sure to give your plot a title and key.
- B. What is the median number of minutes Amelia spend exercising for the 17 days? Use words, numbers, or diagrams to justify your answer.

A.

B.

B. Rubric

New Mexico Rubric for 2-point Open-Ended Items

Score	Description
2	<p>The student response</p> <ul style="list-style-type: none">• offers a correct solution and is well supported by well-developed and accurate explanations.• gives evidence that an appropriate problem-solving strategy was selected and implemented, but may contain minor errors that do not detract from the overall quality of the student response.• is clearly organized and focused, and shows a mathematical understanding of the task or concept.• contains sufficient work to convey thorough understanding of the problem.
1	<p>The student response</p> <ul style="list-style-type: none">• offers a correct solution with no supporting evidence or explanation.• offers a partially correct answer to the problem.• may contain flaws indicating an incomplete understanding of the task or concept.• may show faulty reasoning leading to weak answers or conclusions.• may demonstrate unclear communication in writing or diagrams.• may demonstrate a poor understanding of relevant mathematical procedure or concepts.
0	<p>The student response</p> <ul style="list-style-type: none">• gives an incorrect response with no work shown.• offers no mathematical understanding of the problem• does not address the problem.

C. Student Responses

SCORE 2

50
A

Amelia's Exercises

2 | 2, 6, 6, 8
3 | 0, 2, 7, 9
4 | 0, 0, 5, 6, 7
5 | 0, 1, 2, 8

3/4 means
34

B. The median number of minutes is 40!
There are 17 data items. The middle number
when in numerical order is 40 minutes.

50
A.

Daily Exercise

2	2, 6, 8, 9
3	0, 2, 7, 4
4	0, 0, 5, 6, 7
5	0, 1, 2, 8

2 | 3 = 23

B.

22, 24, 28, 29, 30, 32, 37, 39, 40, 45, 46, 47, 50, 51, 52, 54

Forty minutes is the median.

50
A.

2	2, 6, 8, 9
3	0, 2, 7, 4
4	0, 0, 5, 6, 7
5	0, 1, 2, 8

minutes exercising

B.

2/2 2/6 2/8 2/1 3/0 3/2 3/7 7/1 40 46 48 46 47 56 51 54
58

The median is 40 mins

SCORE 1

50
A.

Amelias Exercise

	Mon	Tues	Wed	Thurs	Fri	Sat
week 1	36	32	46	37	22	56
week 2	45	39	29	40	28	52
week 3	47	40	51	26	58	

B.

40 minutes

SCORE 0

50

A:

$$\begin{array}{r}
 B. 30 \\
 + 32 \\
 \hline
 62 \\
 + 46 \\
 \hline
 108 \\
 + 56 \\
 \hline
 164 \\
 \hline
 6.74
 \end{array}$$

$$\begin{array}{r}
 39.6 \\
 17 \overline{) 674.0} \\
 \underline{51} \\
 164 \\
 \underline{153} \\
 110 \\
 \underline{102} \\
 8
 \end{array}$$

≈ 40 minutes

$$\begin{array}{r}
 47 \quad 37 \\
 \div 9 \quad \div 5 \\
 \hline
 5 \quad 7 \\
 45 \\
 \hline
 2 \\
 10 \\
 \hline
 17 \\
 \hline
 3 \\
 \hline
 61
 \end{array}$$

$$\begin{array}{r}
 37 \\
 + 22 \\
 \hline
 59 \\
 \hline
 109
 \end{array}$$

$$\begin{array}{r}
 T \quad 45 \\
 + \quad 39 \\
 \hline
 84
 \end{array}$$

$$\begin{array}{r}
 + \quad 29 \\
 \hline
 113
 \end{array}$$

$$\begin{array}{r}
 + 40 \\
 \hline
 153
 \end{array}$$

$$\begin{array}{r}
 + 28 \\
 \hline
 181
 \end{array}$$

$$\begin{array}{r}
 + 32 \\
 \hline
 213
 \end{array}$$

$$\begin{array}{r}
 342
 \end{array}$$

$$\begin{array}{r}
 + 47 \\
 \hline
 389
 \end{array}$$

$$\begin{array}{r}
 + 40 \\
 \hline
 429
 \end{array}$$

$$\begin{array}{r}
 + 51 \\
 \hline
 480
 \end{array}$$

$$\begin{array}{r}
 440 \\
 + 26 \\
 \hline
 466 \\
 + 58 \\
 \hline
 524
 \end{array}$$

50

A.

B.

30 ~~32, 26, 28, 29, 30, 32, 37, 39, 40, 45, 47, 51, 52~~

50

A.

Amelia's EXERCISE

B.