Quartiles and box plots worksheet – Grade 8

Grade 8 · Mixed level · 20 questions · **Version X1728**

Name: _____ Date: _____ Score: ___ / 20

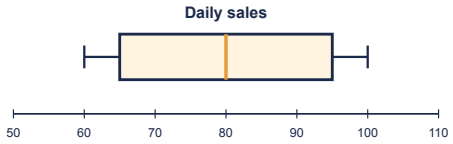
Scan to check answers + earn stars

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1. Work out the median of 56, 88, 62, 64, 70, 81, 52.

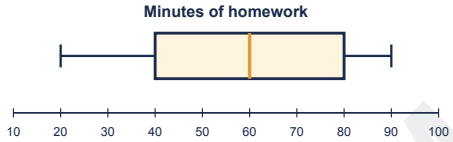
   Answer: _____

2. Find the median shown on this box plot.



   Answer: _____

3. Work out the range shown on this box plot.

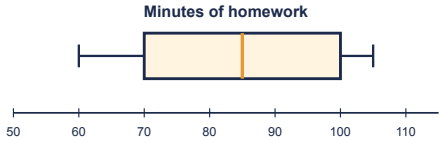


   Answer: _____

4. What is the median of 24, 46, 27, 21, 18, 47, 37, 22, 36, 48, 29?

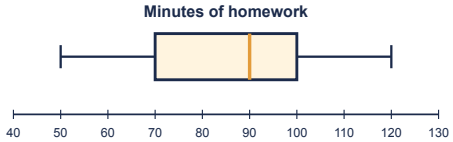
   Answer: _____

5. What is the value of Q1 on this box plot?



   Answer: _____

6. Find the interquartile range (IQR).



   Answer: _____

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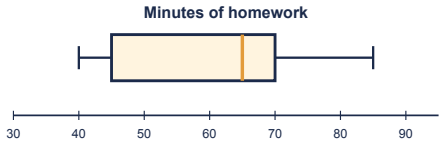
7. Find the median of 22, 48, 31, 52, 47, 56, 45, 46, 51, 55, 28.

   Answer: _____

8. Find the IQR of 42, 41, 27, 11, 22, 46, 20, 13, 23.

   Answer: _____

9. About what percent of the data lies inside the box?



   A. 50% **B.** 25% **C.** 75% **D.** 100%

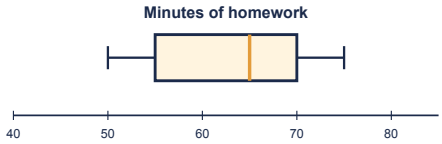
10. Work out the IQR of 30, 26, 37, 26, 18, 36, 39.

    Answer: _____

11. What is the IQR of 39, 41, 56, 27, 56, 26, 46, 57, 44?

    Answer: _____

12. About what percent of the data is above the median?



    A. 50% **B.** 25% **C.** 75% **D.** 10%

13. What is the IQR of 14, 12, 35, 25, 12, 37, 40?

    Answer: _____

14. Find the IQR of 71, 56, 83, 59, 77, 66, 86, 65, 74, 82, 84.

    Answer: _____

15. Using Q3 + 1.5 × IQR, is 70 an outlier for 43, 49, 42, 49, 48, 41, 65, 37, 35, 60, 34?

    A. Yes **B.** No

16. For 57, 53, 68, 59, 57, 64, 45, 67, 30, what is the upper fence, Q3 + 1.5 × IQR?

    Answer: _____

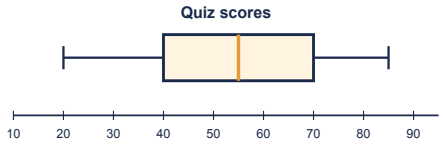
17. Every value on this box plot is multiplied by 3. What is the new IQR?



    Answer: _____

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18. Which half of this box plot's box is longer: below or above the median?

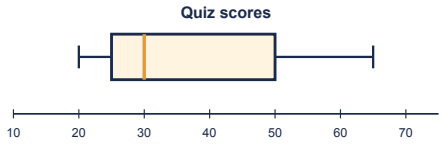


A. Below **B.** Above **C.** They are equal

19. For 68, 70, 71, 49, 74, 51, 40, what is the upper fence, Q3 + 1.5 × IQR?

Answer: _____

20. Every value on this box plot goes up by 20. What is the new IQR?



Answer: _____

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Answer key · Version X1728

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1. **64**
2. **80**
3. **70**
4. **29**
5. **70**
6. **30**
7. **47**
8. **25**
9. **A (50%)**
10. **11**
11. **23**
12. **A (50%)**
13. **25**
14. **18**
15. **A (Yes)**
16. **90.25**
17. **75**
18. **C (They are equal)**
19. **104**
20. **25**

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