

May 17 Saturday Review Session **Answer key**

Mrs. Wang

Saturday Review Session

1. Factor the expression
- $45x + 20$
- using the GCF.

$45x + 20 = \square$

$5(9x+4)$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: End Quiz (1 - 8)> Question #4

2. Find the sum.

$\left(\frac{3}{8}x - 2\right) + \left(\frac{1}{8}x - 5\right) = \square$

$\frac{1}{2}x - 7$

$= \frac{3}{8}x + \frac{1}{8}x - 2 - 5$

$= \frac{4}{8}x - 7$

$= \frac{1}{2}x - 7$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: End Quiz (1 - 8)> Question #1

3. Find the difference.

$\left(\frac{2}{7}x - 6\right) - \left(\frac{1}{7}x - 5\right) = \square$

$= \frac{2}{7}x - 6 - \frac{1}{7}x + 5$

$= \frac{2}{7}x - \frac{1}{7}x - 6 + 5$

$= \frac{1}{7}x - 1$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: End Quiz (1 - 8)> Question #2

4. Simplify
- $\frac{1}{5}(10x - 15) + 3x$
- .

$\frac{1}{5}(10x - 15) + 3x = \square$

$\frac{1}{5} \cdot 10x - \left(\frac{1}{5} \cdot 15\right) + 3x$

$= \frac{10x}{5} - \frac{15}{5} + 3x$

$= 2x + 3x - 3 = \boxed{5x - 3}$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: End Quiz (1 - 8)> Question #3

5. Choose the expression that represents the vertical distance between the lines
- $y = 4x - 2$
- and
- $y = -x + 6$
- .

☐ $3x + 4$

☒ $|5x - 8|$

☐ 8

☐ $|3x - 8|$

$4x - 2 - (-x + 6)$

$= 4x - 2 + x - 6$

$= |5x - 8| \rightarrow \text{distance is positive}$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: End Quiz (1 - 8)> Question #6

6. Identify the terms, coefficients, and constants in the expression
- $8x + 6$
- .

Terms

$8x$

6

Coefficients

8

Constants

6

☐ $8x$

☐ 6

☐ 8

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: Mid Quiz (1 - 7)> Question #1

7.

When $z = 9$, the value of $z^2 - 3$ is .

$$\begin{aligned}
 &9^2 - 3 \\
 &= 9 \cdot 9 - 3 \\
 &= 81 - 3 = 78
 \end{aligned}$$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: Mid Quiz (1 - 7)> Question #3

8.

Evaluate $a \div b$ when $a = 25$ and $b = -\frac{1}{4}$. $a \div b =$

$$\begin{aligned}
 &25 \div (-\frac{1}{4}) \\
 &= 25 \cdot (-4) = -100
 \end{aligned}$$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: Mid Quiz (1 - 7)> Question #4

9.

Write the phrase as an expression.

23 more than a number a An expression is .

$$a + 23$$

Grade 6 Accel: FL 2023>Chapter 6>Chapter 6: Chapter Test (1 - 19)> Question #4

10.

Write the phrase as an expression.

a number x divided by 2An expression is .

$$\frac{x}{2}$$

Grade 6 MRL>Chapter 5>Chapter Test> Question #4

11.

Find the difference.

$$\left(\frac{5}{6}x - 2\right) - \left(\frac{2}{3}x - 2\right) =$$

$$\begin{aligned}
 &\frac{5}{6}x - 2 - \frac{2}{3}x + 2 \\
 &= \frac{5}{6}x - \frac{2}{3}x \\
 &= \frac{5}{6}x - \frac{4}{6}x = \frac{1}{6}x
 \end{aligned}$$

Grade 7 MRL>Chapter 3>Practice Test> Question #5

12.

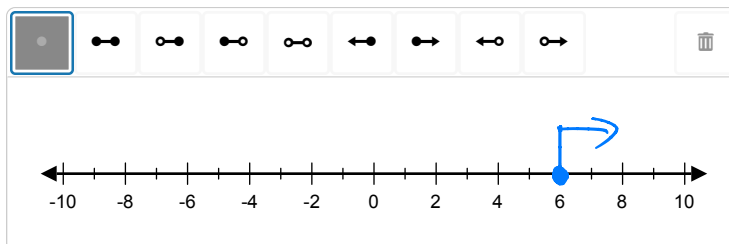
Simplify the expression. Write your answer using decimals.

$$-1.4(p + 2) + 9.4 =$$

$$\begin{aligned}
 &-1.4p + (-1.4 \cdot 2) + 9.4 \\
 &= -1.4p - 2.8 + 9.4 \\
 &= -1.4p + 6.6
 \end{aligned}$$

Grade 7 MRL>Chapter 3>Practice Test> Question #7

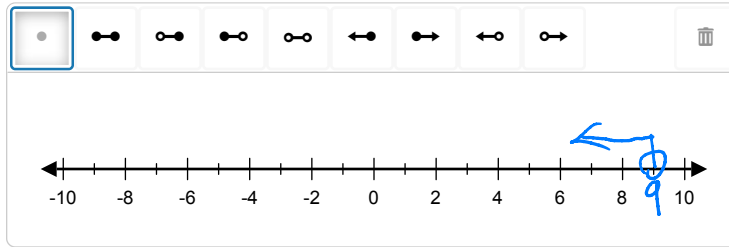
13.

Graph the solution of $x - 2 \geq 4$.

$$\begin{aligned}
 x &\geq 4 + 2 \\
 x &\geq 6
 \end{aligned}$$

Grade 6 Accel: FL 2023>Chapter 7>Chapter 7: End Quiz (1 - 9)> Question #5

14. Graph the solution of
- $2x < 18$
- .



$$x < \frac{18}{2}$$

$$x < 9$$

Grade 6 Accel: FL 2023>Chapter 7>Chapter 7: End Quiz (1 - 9)> Question #6

15. Tell whether
- $x = 4$
- is a solution of
- $\frac{x}{2} < 4$
- .

$$\frac{4}{2} = 2 \quad 2 < 4$$

☒ Yes☐ No

Grade 6 Accel: FL 2023>Chapter 7>Chapter 7: End Quiz (1 - 9)> Question #2

16. Write the word sentence as an equation.

A number a decreased by 20 is 5.An equation is .

$$a - 20 = 5$$

Grade 6 Accel: FL 2023>Chapter 7>Chapter 7: Mid Quiz (1 - 10)> Question #1

17. Solve
- $10 = \frac{5m}{4}$
- .

$$\frac{10}{1} = \frac{5m}{4}$$

$$1.5m = 10 \cdot 4$$

$$5m = 40$$

$$m = \frac{40}{5}$$

$$(m = 8)$$

Grade 6 Accel: FL 2023>Chapter 7>Chapter 7: Mid Quiz (1 - 10)> Question #6

18. Tell whether
- $b = 11$
- is a solution of
- $-3 = 8 - b$
- .

☒ yes☐ no

$$8 - b = -3$$

$$-b = -3 - 8$$

$$-b = -11$$

$$(b = 11)$$

Grade 6 Accel: FL 2023>Chapter 7>Chapter 7: Mid Quiz (1 - 10)> Question #3

19. Your friend has
- x
- blueberries. You have 19 blueberries. You and your friend have a total of 48 blueberries. Which equation can you use to find
- x
- ?

☐ $x + 19 = 48$

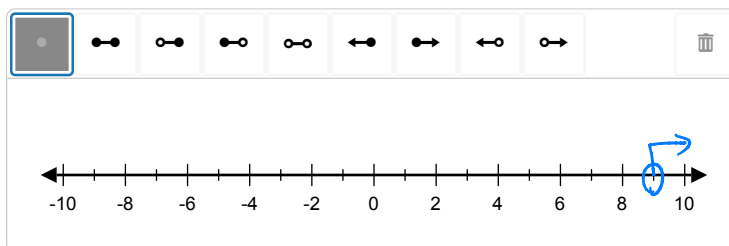
☐ $x - 19 = 48$

☒ $x + 19 = 48$

☐ $19x = 48$

Grade 6: MRL>Chapter 6>Practice Test> Question #2

20. Graph the solution of
- $x - 6 > 3$
- .



$$x > 3 + 6$$

$$x > 9$$

Grade 7: MRL>Chapter 4>Chapter Test> Question #7

21. Write a unit rate for the situation.

Situation: 87 students in 3 classrooms

Unit rate: students per classroom

$$\frac{87 \text{ students}}{3 \text{ classrooms}} = 29 \text{ students/classroom}$$

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: End Quiz (1 - 8)> Question #1

22. You earn \$42 for washing 7 cars. How much do you earn for washing 3 cars?

You earn \$ for washing 3 cars.

18

$$\frac{\$42}{7 \text{ cars}} = \$6/\text{car}$$

$$\$6 \cdot 3 = \$18$$

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: End Quiz (1 - 8)> Question #2

23. Solve the proportion.

$$\frac{x}{9} = \frac{12}{27}$$

$$x = 4$$

$$27 \cdot x = 12 \cdot 9$$

$$27x = 108$$

$$x = 4$$

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: End Quiz (1 - 8)> Question #5

24. a. Complete the ratio table.

Milk (cups)	2	4	<input type="text"/>	8
Flour (cups)	7	<input type="text"/>	21	<input type="text"/>

- b. You have a recipe that indicates to use 2 parts of milk for every 7 parts of flour. You use 8 cups of milk. How much flour do you need?

You need cups of flour.

28

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: Mid Quiz (1 - 6)> Question #3

25. Complete the ratio tables.

Soup A		
Sodium (grams)	6	<input type="text"/>
Soup (cups)	12	156

Soup B		
Sodium (grams)	7	<input type="text"/>
Soup (cups)	13	156

Which soup has more sodium per cup?

☐ Soup A

☒ Soup B

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: Mid Quiz (1 - 6)> Question #4

$$A+B=16$$

26. The sum of a whole number A and a whole number B is 16, and the ratio $A : B$ is equivalent to 5 : 3. Find A and B .

$$A = 10$$

$$B = 6$$

$$5x + 3x = 16$$

$$8x = 16$$

$$x = 2$$

$$A: 5 \cdot 2 = 10$$

$$B: 3 \cdot 2 = 6$$

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: Mid Quiz (1 - 6)> Question #5

27. The tape diagram represents the ratio of your monthly allowance to your friend's monthly allowance. The monthly allowances total \$72. How much is each allowance?

You

--	--	--	--	--

Friend

--	--	--	--

Your allowance is \$ 40, and your friend's allowance is \$ 32.

1st step: add all boxes together. $5+4=9$ boxes
 2nd: $\frac{\$72}{9 \text{ boxes}} = \$8/\text{box}$

3rd: You have 5 boxes: $\$8 \cdot 5 = \40
 Friend has 4 boxes: $\$8 \cdot 4 = \32

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: Chapter Test (1 - 15)> Question #2

28. The tape diagram represents the ratio of your monthly allowance to your friend's monthly allowance. The monthly allowances total \$80. How much is each allowance?

You

--	--	--	--	--

Friend

--	--	--

Your allowance is \$ 50, and your friend's allowance is \$ 30.

1st step: $5+3=8$ boxes in total

2) $\frac{\$80}{8 \text{ boxes}} = \$10/\text{box}$

3) $\begin{cases} \text{You} = 5 \text{ boxes} \cdot \$10 = \$50 \\ \text{Friend} = 3 \text{ boxes} \cdot \$10 = \$30 \end{cases}$

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: Chapter Test (1 - 15)> Question #2

29. a. Complete the ratio table.

Sugar (cups)	7	14	<u>21</u>	28
Milk (cups)	4	<u>8</u>	12	<u>16</u>

- b. You have a recipe that indicates to use 7 parts of sugar for every 4 parts of milk. You use 28 cups of sugar. How much milk do you need?

You need 16 cups of milk.

① $\frac{\text{sugar}}{\text{milk}} = \frac{7}{4} = \frac{28}{x}$
 given

x : # cups of milk

② $\frac{7}{4} = \frac{28}{x}$

$7 \cdot x = 4 \cdot 28$
 $7x = 112$

$x = \frac{112}{7} = 16$

Grade 6 Accel: FL 2023>Chapter 8>Chapter 8: Chapter Test (1 - 15)> Question #3

30. Find the sale price of a \$15 item after a 20% discount.

The sale price is \$ 12.

$\$15 \cdot 80\%$
 $= \$15 \cdot 0.8 = \12

Grade 6 Accel: FL 2023>Chapter 9>Chapter 9: End Quiz (1 - 10)> Question #4

$$2\% = 0.02$$

31. You deposit \$500 in a savings account. The account earns 2% simple interest per year.

a. What is the interest earned after 8 years?

$$I = P \cdot R \cdot T$$

\downarrow principal \downarrow rate \rightarrow time

The interest earned is \$80 after 8 years.

b. What is the balance after 8 years?

$$= \$500 \cdot 0.02 \cdot 8$$

$$= 80$$

The balance is \$580 after 8 years.

580

$$500 + 80 = \$580$$

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32. Write the percent as a decimal.

$$15\% = \square \quad 0.15$$

Grade 6 Accel: FL 2023>Chapter 9>Chapter 9: Chapter Test (1 - 22)> Question #1

33. Write $\frac{3}{4}$ as a percent.

$$\frac{3}{4} = \square \%$$

75

$$3 \div 4 = 0.75 = 75\%$$

Grade 6 Accel: FL 2023>Chapter 9>Chapter 9: Chapter Test (1 - 22)> Question #3

34. What number is 86% of 50?

43 is 86% of 50.

$$0.86 = 86\%$$

$$50 \cdot 0.86 = 43$$

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35. You deposit \$600 in a savings account. The account earns 1% simple interest per year.

a. What is the interest earned after 10 years?

$$I = P \cdot R \cdot T$$

The interest earned is \$60 after 10 years.

$$= \$600 \cdot 0.01 \cdot 10$$

$$= \$60$$

b. What is the balance after 10 years?

The balance is \$660 after 10 years.

b: 660

Grade 6 Accel: FL 2023>Chapter 9>Chapter 9: Chapter Test (1 - 22)> Question #15

36. Order the numbers from least to greatest.

$$\equiv 7\% \quad \equiv 0.01 \quad \equiv \frac{2}{20} \quad \equiv 0.11$$

Answer: $0.01 < 7\% < \frac{2}{20} < 0.11$

Grade 6 Accel: FL 2023>Chapter 9>Chapter 9: Chapter Test (1 - 22)> Question #7

$$7\% = 0.07$$

$$\frac{2}{20} = 0.1$$

$$\Rightarrow 0.11 > 0.1 > 0.07 > 0.01$$

$$= 0.11 > \frac{2}{20} > 7\% > 0.01$$

37. Order the numbers from
- least to greatest
- .

$$\equiv 0.12 \equiv 10\% \equiv \frac{3}{40} \equiv 0.08$$

$0.1 \quad 0.075$

Grade 6 Accel: FL 2023>Chapter 9>Chapter 9: Chapter Test (1 - 22)> Question #4

$$0.12 > 0.1 > 0.08 > 0.075$$

Answer: $\frac{3}{40} < 0.08 < 10\% < 0.12$

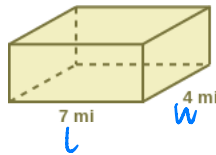
38. 36.1 is what percent of 95?

36.1 is % of 95.

Grade 7: MRL>Chapter 6>Practice Test> Question #7

$$\frac{36.1}{95} = 0.38 = 38\%$$

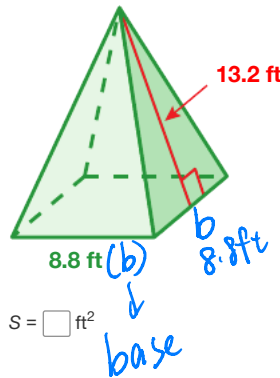
39. Find the
- surface area
- of the rectangular prism.

S = mi²

Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: End Quiz (1 - 6)> Question #1

$$\begin{aligned} SA &= 2 \cdot (l \cdot w + l \cdot h + w \cdot h) \\ &= 2 \cdot (7 \cdot 4 + 7 \cdot 3 + 4 \cdot 3) \\ &= 2 \cdot (28 + 21 + 12) \\ &= 2 \cdot 61 = 122 \text{ mi}^2 \end{aligned}$$

40. Find the
- surface area
- of the square pyramid.

S = ft²

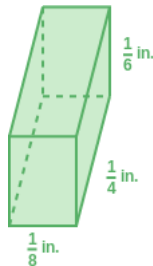
Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: End Quiz (1 - 6)> Question #2

SA for square pyramid, only apply when the base is Square

Because it's given square pyramid, so we know all base side = 8.8 ft

$$\begin{aligned} SA &= b^2 + 2 \cdot b \cdot h \\ &= b \cdot b + 2 \cdot b \cdot h \\ &= 8.8^2 + 2 \cdot 8.8 \cdot 13.2 \\ &= 77.44 + 232.32 = 309.76 \text{ ft}^2 \end{aligned}$$

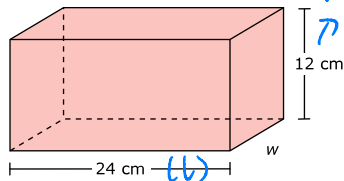
41. Find the
- volume
- of the prism. Write the answer as a fraction in simplest form.

V = in.³

Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: End Quiz (1 - 6)> Question #3

$$\begin{aligned} V &= l \cdot w \cdot h \\ &= \frac{1}{8} \cdot \frac{1}{4} \cdot \frac{1}{6} \\ &= \frac{1 \times 1 \times 1}{8 \times 4 \times 6} \\ &= \frac{1}{192} \text{ in}^3 \end{aligned}$$

42. Find the width of the box.

Volume = 2,592 cm³The width is centimeters. h

$$V = l \cdot w \cdot h$$

$$2592 = 24 \cdot w \cdot 12$$

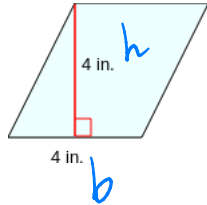
$$2592 = 288w$$

$$288w = 2592$$

$$w = \frac{2592}{288} = 9 \text{ cm}$$

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43. Find the area of the parallelogram.

A = in.²

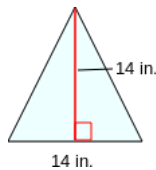
$$A = b \cdot h$$

$$= 4 \cdot 4$$

$$= 16 \text{ in}^2$$

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44. Find the area of the triangle.

A = in.²

98

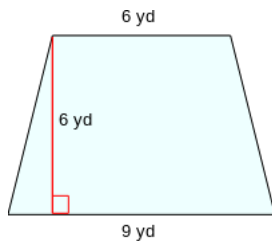
$$A = \frac{b \cdot h}{2}$$

$$= \frac{14 \cdot 14}{2}$$

$$= \frac{196}{2} = 98 \text{ in}^2$$

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45. Find the area of the trapezoid.

A = yd²

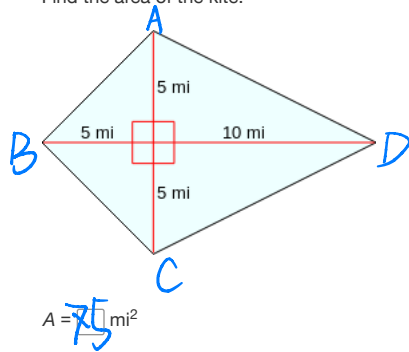
45

$$A = \frac{(\overset{\text{top side}}{\hat{a}} + \overset{\text{bottom side}}{\hat{b}}) \cdot h}{2}$$

$$= \frac{(6 + 9) \cdot 6}{2} = \frac{15 \cdot 6}{2} = \frac{90}{2} = 45 \text{ yd}^2$$

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46. Find the area of the kite.



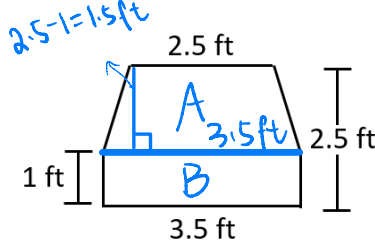
$$A = \frac{AC \cdot BD}{2}$$

$$AC = 5 + 5 = 10 \text{ mi} \quad BD = 5 + 10 = 15 \text{ mi}$$

$$\frac{10 \cdot 15}{2} = \frac{150}{2} = 75 \text{ mi}^2$$

Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: Mid Quiz (1 - 6)> Question #3

47. A worker charges \$70 per square foot to install windows. How much does it cost to install the window shown?



$$\text{Area A: } \frac{(a+b) \cdot h}{2} = \frac{(2.5+3.5) \cdot 1.5}{2}$$

$$\Rightarrow \frac{6 \cdot 1.5}{2} = \frac{9}{2} = 4.5 \text{ ft}^2$$

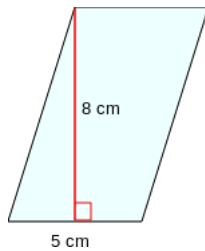
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$$\text{Area B: Rectangle} = l \cdot w = 3.5 \cdot 1 = 3.5 \text{ ft}^2$$

$$A + B = 4.5 + 3.5 = 8 \text{ ft}^2$$

Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: Mid Quiz (1 - 6)> Question #5

48. Find the area of the parallelogram.



$$A = b \cdot h$$

$$= 5 \cdot 8$$

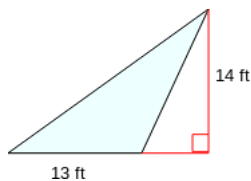
$$= 40 \text{ cm}^2$$

A = cm²

40

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49. Find the area of the triangle.



$$A = \frac{b \cdot h}{2}$$

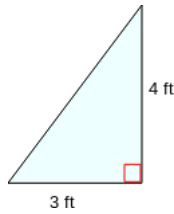
$$= \frac{13 \cdot 14}{2} = \frac{182}{2} = 91 \text{ ft}^2$$

A = ft²

91

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50. Find the area of the triangle.

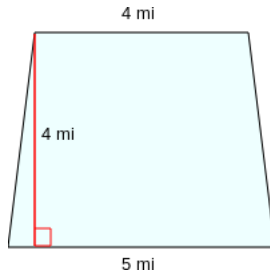


$$A = \boxed{6} \text{ ft}^2$$

$$\begin{aligned} A &= \frac{b \cdot h}{2} \\ &= \frac{3 \cdot 4}{2} \\ &= \frac{12}{2} = \boxed{6 \text{ ft}^2} \end{aligned}$$

Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: Chapter Test (1 - 15)> Question #2

51. Find the area of the trapezoid.

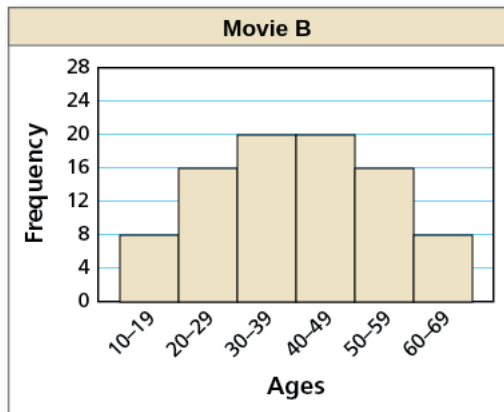
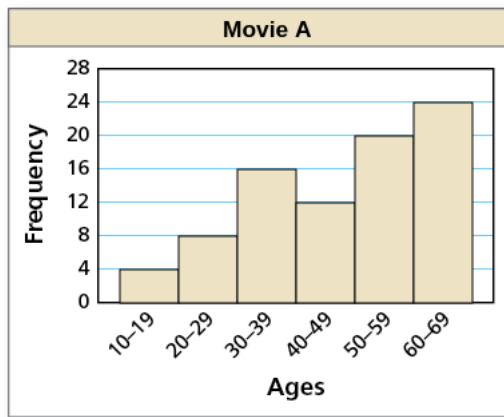


$$A = \boxed{18} \text{ mi}^2$$

$$\begin{aligned} &\frac{(a+b) \cdot h}{2} \\ &= \frac{(4+5) \cdot 4}{2} = \frac{9 \cdot 4}{2} = \frac{36}{2} \\ &= \boxed{18 \text{ mi}^2} \end{aligned}$$

Grade 6 Accel: FL 2023>Chapter 10>Chapter 10: Chapter Test (1 - 15)> Question #4

52. The histograms show the ages of people watching two movies in a theater.



- a. Describe the shape of each distribution.

For Movie A, the distribution is

For Movie B, the distribution is

- b. Which movie has older viewers?

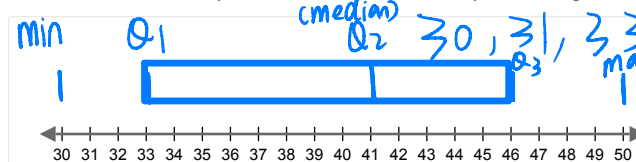
Movie ☒ has older viewers because

Grade 6 Accel: FL 2023>Chapter 11>Chapter 11: End Quiz (1 - 4)>Question #2

53. Use the number line to identify the least value, first quartile, median, third quartile, and greatest value of the data.

~~38, 41, 45, 46, 49, 38, 50, 30, 43, 33, 31~~

A = least value, B = first quartile, C = median, D = third quartile, E = greatest value



A B C D E

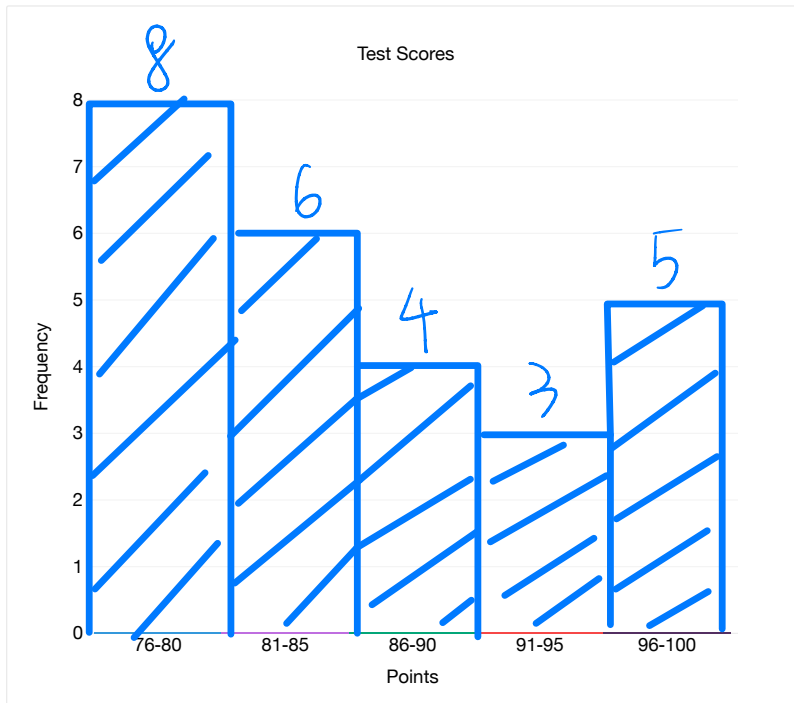
① order!
 38, 38, 31, 33, 41, 43, 45, 46, 49, 50
 I cross # off, so I wouldn't get confused.
 ② least value: 30
 ③ greatest value: 50
 ④ Get Q2 (median) first: 41
 ⑤ Q1: Left # set = 30, 31, 33, 38, 38
 median = 33
 ⑥ Q3: Right # set = 43, 45, 46, 49, 50
 median is 46

Grade 6 Accel: FL 2023>Chapter 11>Chapter 11: End Quiz (1 - 4)>Question #3

54. The frequency table shows the test scores of students in a class. Display the data in the histogram.

Points	76-80	81-85	86-90	91-95	96-100
Frequency	8	6	4	3	5

* no gaps between intervals unless it's 0 for histogram



Identify any gaps, clusters, or outliers.

group of values that show up frequently and close together.
In a histogram: A cluster appears as a tall groups of bars (a peak)

gap	none (x empty space)
cluster	76-85
outlier	none

☐ none
 ☒ 76-85
 ☐ 86-90
 ☐ 91-95

Grade 6 Accel: FL 2023>Chapter 11>Chapter 11: End Quiz (1 - 4)> Question #1

55. The stem-and-leaf plot shows the gas mileages of several vehicles made by a company.

Stem	Leaf
2	x 8 8 8 9 9
3	0 0 x 2 2 3 3 4 5 5 8 8
4	x
5	8

We have 20 numbers in total

We see center here.
think ways for center: mean, median, mode

Key: 2|7 = 27 miles per gallon

- ① list all # in order: 0, 0, 1, 1, 1, 2, 2, 3, 4, 5, 5, 6, 7, 8, 8, 8, 8, 8, 9, 9
- ② we x have outliers in the # set, so not median
- ③ we have 5 8s in the number set, the 're < half # of the # set, so not mode
- ④ we choose mean
- notes measure center
 ① mean (average)
 → # are close, x outliers
 ② median (middle)
 → v outlier
 ③ mode (more than half)

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$$Q2 = 84.5$$

$$\begin{aligned} IQR &= Q3 - Q1 \\ &= 87.5 - 83 \\ &= 4.5 \end{aligned}$$

$$\begin{aligned} LOB &= 83 - 1.5 \cdot 4.5 \\ &= 83 - 6.75 = 76.25 \end{aligned}$$

$$\begin{aligned} UOB &= 87.5 + 1.5 \cdot 4.5 \\ &= 87.5 + 6.75 \\ &= 94.25 \end{aligned}$$

Only 138 is out of the range, so 138 is the outlier

56. Identify the outlier in the data set.

89, 87, 86, 83, 81, 84, 133, 85, 83, 84, 80, 88

The outlier is 138

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notes: lower outlier boundary: $Q1 - 1.5 \cdot IQR$
upper outlier boundary: $Q3 + 1.5 \cdot IQR$

that out of boundaries are outliers

$$Q2(\text{median}) = \frac{84 + 85}{2} = 84.5$$

Q1: Left # set (median) = 83

Q3: Right: 85, 86, 87, 88

$$\frac{87 + 88}{2} = 87.5 (Q3)$$

57. Identify the outlier in the data set.

37, 37, 35, 38, 36, 80, 34, 33, 39, 34, 30, 38

The outlier is 80

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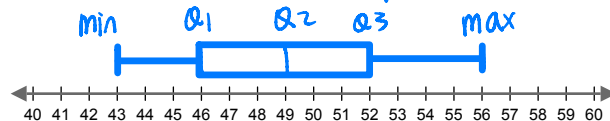
outlier means this # is much bigger/smaller than other #s in the data set. This case, 80 is much bigger than other #.

58. Use the number line to identify the least value, first quartile, median, third quartile, and greatest value of the data.

54, 46, 52, 56, 45, 47, 50, 43, 49, 49, 52

A = least value, B = first quartile, C = median, D = third quartile, E = greatest value

Let students draw Box plot for review



A 43 B 46 C 49 D 52 E 56
min Q1 Q2 Q3 max

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Q2 (median)

Q1: 1) Left # set: 43, 45, 46, 47, 49

2) median = 46

Q3: 1) Right # set: 50, 52, 54, 56

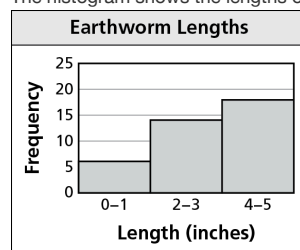
2) median = 52

59. Each backpack in a store is on sale for \$6 off the original price. How does this affect the mean, median, and mode of the prices?

- ☐ The mean and median each decrease by \$6. The mode stays the same.
- ☐ The mean and mode each decrease by \$6. The median stays the same.
- ☒ The mean, median, and mode each decrease by \$6.
- ☐ The median and mode each decrease by \$6. The mean stays the same.

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60. The histogram shows the lengths of earthworms in a terrarium. Which interval contains the most data values?

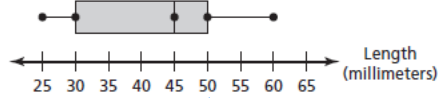


- ☐ 0-1 inch
- ☐ 2-3 inches
- ☒ 4-5 inches

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61. The box-and-whisker plot shows the lengths of caterpillars at an exhibit. What fraction of the caterpillars has a length of at least 50 millimeters?

min Q1 Q2 Q3 max



☒ $\frac{1}{4}$

☐ $\frac{1}{2}$

☐ $\frac{2}{3}$

☐ $\frac{3}{4}$

75th percentile (Q3)

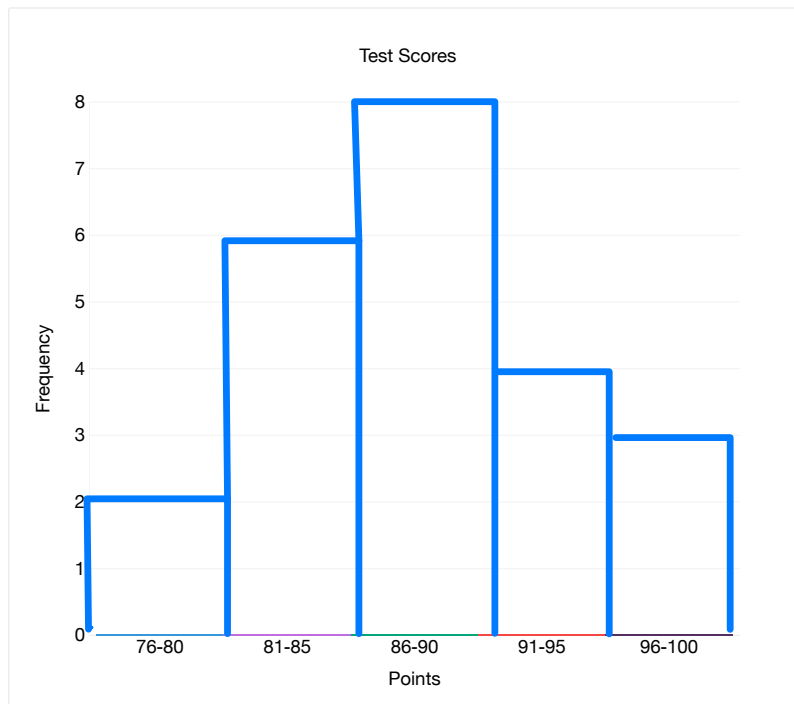
Remember
 Q1 (25th percentile)
 Q2 (50th percentile)
 Q3 (75th percentile)

$$1 - \frac{3}{4} = \frac{1}{4}$$

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62. The frequency table shows the test scores of students in a class. Display the data in the histogram.

Points	76-80	81-85	86-90	91-95	96-100
Frequency	2	6	8	4	3



Identify any gaps, clusters, or outliers.

gap	<input type="checkbox"/>	none
cluster	<input type="checkbox"/>	81-90
outlier	<input type="checkbox"/>	none

☐ none

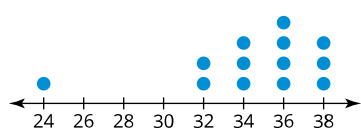
☐ 76-80

☐ 81-90

☐ 91-100

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63. The dot plot shows the gas mileages (in miles per hour) of several vehicles made by a company.



we have an outlier,
so we use median

The median the most appropriate measure(s) to describe the center. The IQR the most appropriate measure(s) to describe the variation.

v outlier, IQR

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64. You ask 200 randomly chosen students to name their favorite ice cream flavor. There are 1800 students in the school. Estimate the number of students in the school whose favorite ice cream flavor is chocolate chip.

Favorite Ice Cream Flavor	
Vanilla	48
Chocolate	46
Strawberry	55
Chocolate Chip	51

The number of students in the school whose favorite ice cream flavor is chocolate chip is about .

459

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