7th Grade

Quarter 2

Review

Calculator Inactive:

NO calculator – Look on the back of the book to make sure you complete the gridded response correctly.

Name _____

Teacher _____

Adapted from SchoolNet and CMapp

1. What is the value of $-23+47-(-18)+(-12)?$

2. What is the value of $-18.24-6.79$?

3. Anna has 5 pieces of wire that are each $15\frac{1}{2}$ ft long. She wants to cut each wire into $3\frac{1}{2}$ ft long pieces she needs for a project. How many pieces of wire will she have after she is done cutting each wire?

4. What fraction is equivalent to $0.\dot{3}$?

5. What is the value of x in the equation $3+6x=-15$?

A. $x=2$ B. $x=-2$ C. $x=-3$ D. $x=3$

6. Lydia needs $1,200.00 to purchase a computer. She has saved $\frac{1}{3}$ of the money so far this year. She will save $\frac{3}{4}$ of the remaining amount by the end of the year. ***About*** how much money will she have saved at the end of the year?

A. $400 B. $600 C. $800 D. $1,000

7. Which expression is equivalent to $3(-2m+2)-4(2m-9)$?

A. $-14m+42$ B. $-14m-30$ C. $2m-30$ D. $-2m+42$

8. Evaluate the following expression for $x=-3 \wedge y=-12$; $3x-y$.

A. 3 B. -3 C. 21 D. -21

9. What is the solution to the following equation? $3(2x-12)-2x=-12$

A. $x=24$ B. $x=0$ C. $x=6$ D. $x=12$

10. Which set of angle measures could be the interior angles of a triangle?

A. $25°, 30°, 35°$ B. $35°, 60°, 75°$ C. $45°, 60°, 75°$ D. $60°, 90°, 120°$

---

11. What is the value of the expression below? Answer must be written as an improper fraction.

$$-2\frac{1}{3} - 3\frac{5}{6} + 1\frac{1}{3}$$

12. The hottest temperature recorded in a certain city was 98°F. The coldest recorded temperature in the same city was $-¿$ 12°F. What is the difference between these temperatures?

13. Volunteers planted 2,000 flowers at a park. Each flower cost $1.65. How much did all the flowers cost?

14. What is the value of $-18+4(-7)$?

15. A class of 32 students earned grades of A, B, C, or D on a test.

- One-fourth of students earned an A.
- Half of the remaining students earned a B.
- Two students earned a D.

What fraction of the students earned a C?

A. $\frac{1}{4}$ B. $\frac{3}{4}$ C. $\frac{3}{16}$ D. $\frac{5}{16}$

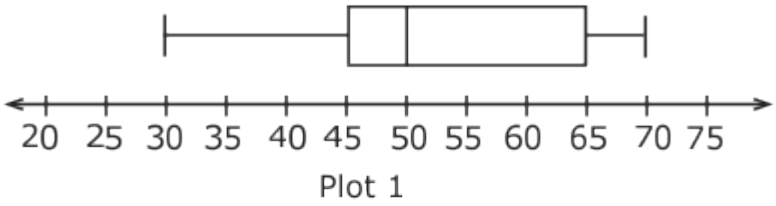
16. Max needs 345 cement blocks to build a wall 40 cm thick. He needs 205 cement blocks to build a wall 25 cm thick. Each block costs $0.75. How much more will the thicker wall cost?

A. $105.00 B. $153.75 C. $258.75 D. $412.50

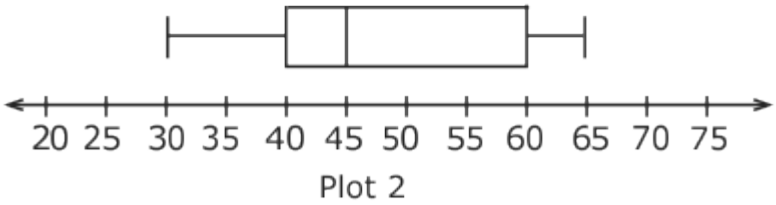
17. What is the value of *n* in the equation $-3n-9+9n=-33$?

A. $x=-4$ B. $x=-7$ C. $x=4$ D. $x=7$

18. Which statement below is true based on the box plots?



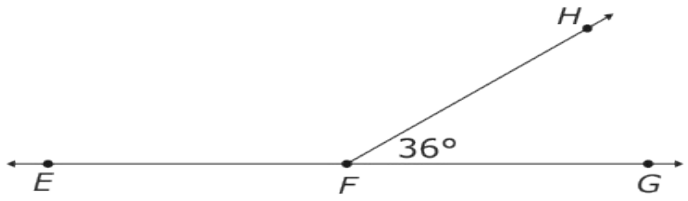
Plot 1



Plot 2

A. Plot 2 has a larger interquartile range.
B. Plot 1 and 2 have the same interquartile range.
C. Plot 2 has a larger median.
D. Plots 1 and 2 have the same median.

19. What is the measure of angle EFH?



A. 36 ° B. 144 ° C. 90 ° D. 180 °

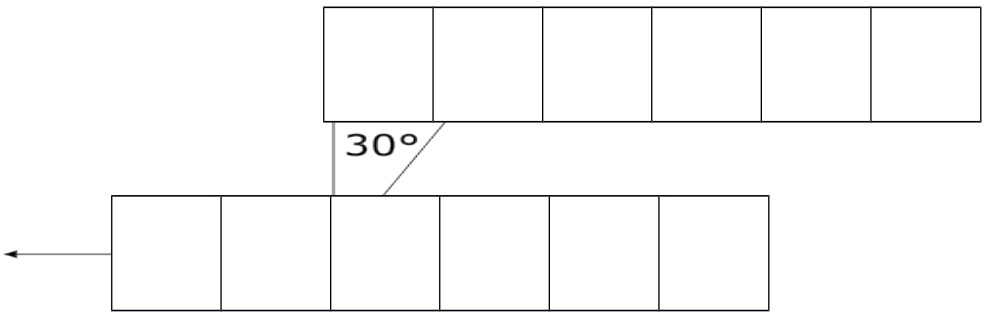
20. Solve the following equation: $12=48-4x$.

A. $x=-9$ B. $x=9$ C. $x=15$ D. $x=-15$

---

21.  What is the value of $\left(-\frac{1}{7}\right)(28)\left(-\frac{1}{4}\right)(-3)$?

22. In the figure below, what is the value of x?



23. What is the value of the expression $\frac{-3}{7}-\frac{2}{5}$?

24.  What is the value of the expression?
$-14+8(-2)-(-12)$

25. Find the solution to the following equation. $x-\frac{2}{5}=-3\frac{2}{3}$

A. $x=3\frac{4}{15}$ B. $x=-3\frac{4}{15}$ C. $x=4\frac{1}{15}$ D. $-4\frac{1}{15}$

26. Jeremy has $36 saved. He wants to have $300 for a trip next year. He will save the same amount of money each month for the next 12 months. How much money will Jeremy need to save each month?

A. $22 B. $24 C. $25 D. $28

27. Which expression is equivalent to $0.4(-3.6-0.5x)+0.8(1.9+x)$?

A. $x+2.96$ B. $0.6x+0.08$ C. $x+0.08$ D. $0.6x+2.96$

28. If $\frac{1}{72}X=\frac{1}{9}$, then what does $\frac{96}{x}$ equal?

A. 16 B. 12 C. 8 D. 6

29. What is the ratio of Emma's dogs to total animals in the table?

Emma's Pets

Pet	Number
dogs	3
cats	2
fish	10

A. 3 to 13 B. 3 to 12 C. 3 to 15 D. 3 to 2

30. Which expression is equivalent to $4x-6x+12-20-5x$?

A. $7x+8$ B. $-7x-8$ C. $-7x+8$ D. $7x-8$

---

31. What is the value of $(-2)^3$?

32. Which decimal is equivalent to $3\frac{1}{5}$?

33. Simplify the following expression. $-3.4(0.2)-4.52$

34. What is the value of the expression $-6\frac{3}{4}\div\left(-1\frac{3}{12}\right)$?

35. The width of a rectangle is 5 less than its length. Which expression represents the perimeter of the rectangle with a length of x? Draw and label a rectangle to help!!

A. $2x-5$ B. $2x-10$ C. $4x-5$ D. $4x-10$

36. What is the solution to the following equation? $-3x-16-5x=-64$

A. $x=6$ B. $x=-6$ C. $x=-8$ D. $x=8$

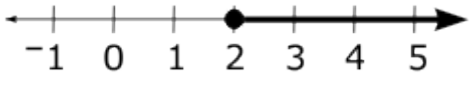
37. Foster bought a television and paid $\frac{3}{4}$ of the original price, including tax. The original price of the television was \$500. How much change did Foster receive if he paid the cashier \$400?

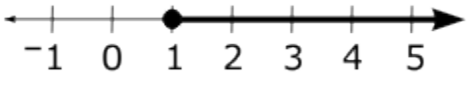
A. \$25 B. \$50 C. \$375 D. \$150

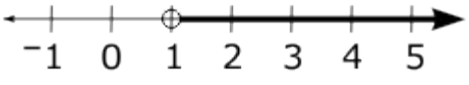
38. Find the solution to the following equation. $12=3(-2y-12)+12$

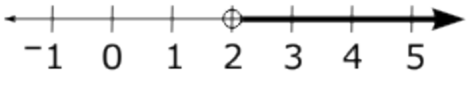
A. $y=10$ B. $y=6$ C. $y=-10$ D. $y=-6$

39. Which graph is the solution to the inequality $2x-1>3$?

A. 

B. 

C. 

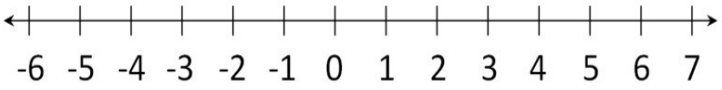
D. 

40. Solve the following inequality. $\frac{m}{-5} \leq 10$

A. $m \geq -50$ B. $m \leq -50$ C. $m \geq -2$ D. $m \leq -2$

---

41. What is the value of $A - B$?



42. Evaluate the following expression $\frac{a}{b} - c$ for $a = -20, b = 4, \wedge c = -5$.

43. Mrs. Norris has cards labeled with rational numbers.

- Three cards are labeled -6.35 .
- One card is labeled -4.32 .
- Two cards are labeled 8.31 .

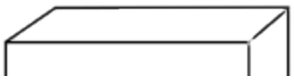
What is the average of the numbers on the cards?

44. An art class has 33 students. The ratio of boys to girls is 5 : 6. How many girls are in this class?

45. Right now, Bert is twice as old as Nathan. If N represents Nathan's age three years ago, which expression represents how old Bert is now?

A. $(N+3)x2$ B. $(N-3)x2$ C. $2N+3$ D. $2N-3$

46. What is the volume of this box?



A. 270 in.^{3}

B. 291 in.^{3}

C. 540 in.^{3}

D. 582 in.^{3}

47. Hank's age is 5 more than three times John's age. Hank is 29 years old. How old is John?

A. 8 B. 11 C. 72 D. 102

48. Sara needs $2\frac{1}{4}$ yards of fabric to make a pillow and $5\frac{1}{2}$ yards of the same fabric to cover some chairs. The fabric costs $0.85 per yard, including tax. How much will the fabric cost Sara?

A. $6.23 B. $65.88 C. $6.59 D. $62.33

49. What is the solution to $-6x-12\leq -48$?

A. $x\leq 6$ B. $x\geq 6$ C. $x\leq -6$ D. $x\geq -6$

50. A cookie recipe calls for $2\frac{1}{4}$ cups of flour. How much flour is needed to make only 50% of the recipe?

A. 1.5 cups B. 1.25 cups C. 1.125 cups D. 2.25 cups

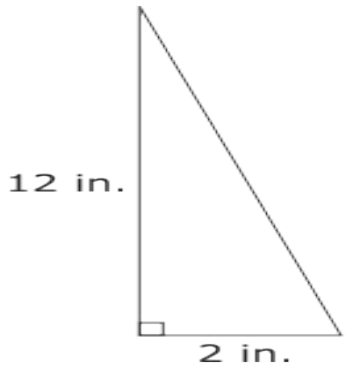
---

51. Simplify the following expression: $-4-8(3)+12\div -2$

52. Simplify the following expression: $\frac{1}{5}-0.65-2\frac{1}{4}+3.53$

53. Sara purchased 4.5 yards of fabric for $101.25. How much was it per yard of fabric?

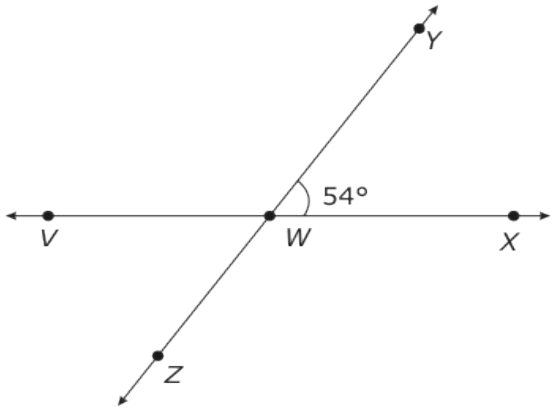
54. What is the area of the triangle to the right?



55. Solve the following equation. $-2(4y-9)+5y=-36$

A. $y=18$ B. $y=-18$ C. $y=6$ D. $y=-6$

56. In the figure below, $\angle XWY$ is supplementary to $\angle YWV$.



What is the measure of $\angle$ YWV?

A. 36° B. 90°

C. 126° D. 180°

57. Which expression is equivalent to $-4(x+2)-\frac{1}{2}(2x-6)$?

A. $-5x-4$ B. $-5x-5$ C. $-8x-4$ D. $-8x-5$

58. Ms. Lovett spends $560 on monthly bills. Of this total amount 15% is for phone service, $\frac{1}{8}$ is for cable, and $\frac{2}{7}$ is for utilities. If the rest of the total is for food, how much does she spend for food?

A. $262.50 B. $297.50 C. $314.00 D. $246.00

59. What is the solution to the inequality $\frac{x}{-5}-3>-7$?

A. $x>20$ B. $x<20$ C. $x<-20$ D. $x>-20$

60. Which inequality represents "*there are no more than 25 students on the bus*"?

A. $x<25$ B. $x>25$ C. $x\leq 25$ D. $x\geq 25$

61. What is the value of $-3(3^2-16)+12$?

62. Two angles in a triangle measure 102° and 54°. What is the measure of the third angle?

63. Mrs. Kasse had 36 guests at her house for a party. Each guest brought one item.

- One-third of the guests brought drinks.
- One-fourth of the guests brought a dessert.
- The rest of the guests brought chips.

How many guests

brought chips?

64. The table to the right shows the cost to go on different numbers of rides at a local carnival. What is the cost per ride?

Number of Rides (r)	Cost (c)
2	$3.50
5	$8.75
8	$21.00

65. What is the solution to the inequality $-48 \geq -4x - 24$?

A. $x \leq 6$ B. $x \geq 6$ C. $x \leq -6$ D. $x \geq -6$

66. Which expression is equivalent to $3(-2m+2) - 7(3m-9)$?

A. $27m + 69$ B. $-27m - 57$ C. $-27m + 69$ D. $-27m - 7$

67. Solve the following equation. $\frac{-2}{3}x - \frac{1}{6} = \frac{3}{4}$

A. $x = 1\frac{3}{8}$ B. $x = -1\frac{3}{8}$ C. $x = \frac{11}{18}$ D. $x = \frac{-11}{18}$

68. Julie has $200 to plan a dance. There is a one-time fee of $150 to reserve a room. It also costs $1.50 per person for food and drinks. What is the maximum number of people that can come to the dance?

A. 33 B. 34 C. 100 D. 133

69. What is the value of $-4x + 3y, if\ x = 2 \wedge y = -5$?

A. 7 B. -23 C. 25 D. 26

70. Solve the following equation. $-24 = \frac{x}{3} + 12$.

A. $x = -4$ B. $x = -12$ C. $x = -36$ D. $x = -108$

---

71. Brianna makes pies. To make 5 pies, she uses $7\frac{1}{2}$ cups of flour. How many cups of flour are needed to make 1 pie?

72. What is the value of $2\frac{1}{3} \div 3\frac{1}{2} \times -5\frac{1}{4}$?

73. Simplify the following expression: $-3.3(0.6)-14.8$

74. Which decimal | | | | | | | is equivalent to $\frac{27}{20}$?

75. What is the solution to the following equation? $5x-(-15)=-20$

A. $x=-7$ B. $x=7$ C. $x=-1$ D. $x=1$

76. Which equation could be used to represent the data in the table?

x	*y*
-3	-9
-1	-3
3	9
7	21

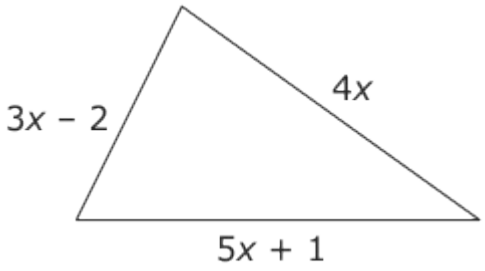
A. $y=-3x$ B. $y=3x$

C. $x=3y$ D. $x=-3y$

77. Which set of numbers is included in the solution set of $4>-2x+8$?

A. $\{2,8,-4\}$ B. $\{3,-5,12\}$ C. $\{1,-4,-12\}$ D. $\{2,0,-5\}$

78. What is the perimeter of the triangle to the right?



A. $12x-3$ B. $12x-1$

C. $12x+1$ D. $12x+3$

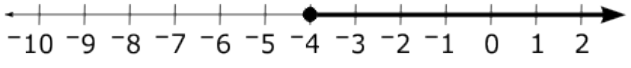
79. An algebraic inequality is written in words:

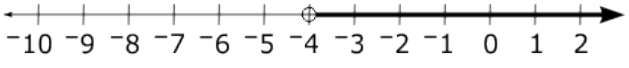
"The product of 15 and a number, increased by 8 is at most 44."

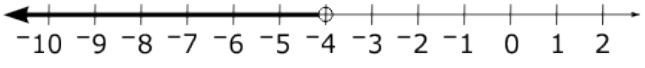
Which choice matches the statement?

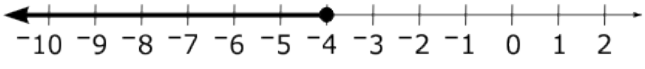
A. $15n+8<44$ B. $15n+8>44$ C. $15n+8\leq 44$ D. $15n+8\geq 44$

80. Which graph is the solution to the inequality $-3x+2\leq 14$?

A. 

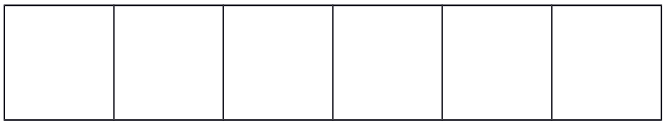
B. 

C. 

D. 

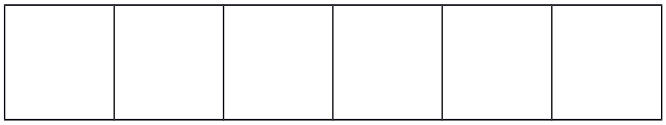
---

81. A cookie recipe requires $\frac{2}{3}$ cup of sugar for $\frac{1}{3}$ batch of cookies. How much sugar is needed for 1 batch of cookies?



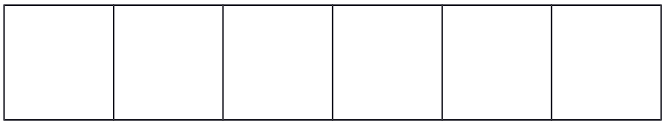
82. What percent of 40 is 15 ?

83. Two dozen flowers cost $18.96, and four dozen flowers cost $37.92. What is the cost for one flower?



84. What is the constant of proportionality for the data in the table below?

Hours worked	Earnings
8	$92.00
12	$138.00
15	$172.50
17	$195.50



85. Which inequality has 3 in its solution set?

A. $6n+4<20$ B. $6n-4>20$ C. $6n+4>20$ d. $6n-4\geq 20$

86. Nicole earned \$75. She put $\frac{1}{3}$ of her money into her savings account. She bought a shirt for \$17.11 and a sweater for \$26.74. How much money does Nicole have left?

A. \$6.15 B. \$ 9.65 C. \$18.85 D. \$31.15

87. A taxi charges \$3, plus \$1.50 for each mile traveled. Mr. Lewis rode in the taxi from his home to the airport and was charged \$30. Write an equation to represent the situation.

A. $3x+1.50=30$ B. $\frac{x}{3}+1.50=30$ C. $3x-1.50=30$ D. $1.50x+3=30$

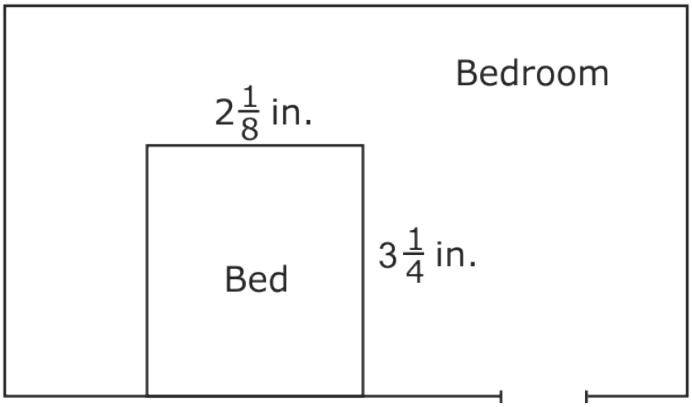
88. For a conference, a hotel charges \$45 per hour for the use of a banquet room, plus \$22.95 per person. What is the total cost to rent a banquet room for 3 hours for 180 people?

A. \$337.95 B. \$1,572.75 C. \$4,266.00 D. \$8,168.85

89. Which expression is equivalent to $-9(x-4)-6x-x+(-5)$?

A. $-15x-31$ B. $-16x-31$ C. $-15x+31$ D. $-16x+31$

90. Elaine drew the model below of her room and bed. The scale of the model is 1 in. = 2 ft.



What is the ***approximate*** area of her actual bed?

A. 7 ft^2

B. 14 ft^2

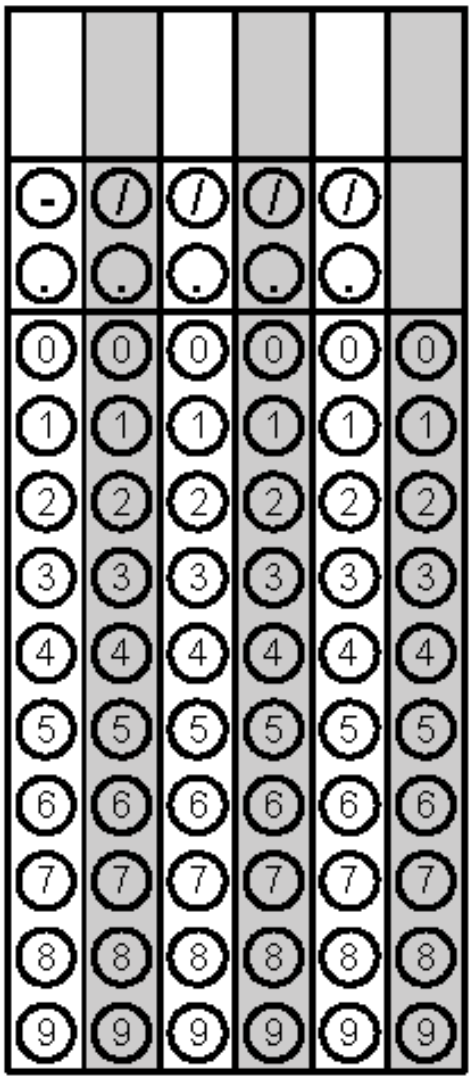
C. 24 ft^2

D. 28 ft^2

Make sure you complete your gridded responses properly.

- No mixed numbers – all fractions must be improper.
- Negative answers must be FRONT loaded.
- You cannot put a repeating decimal into a gridded response.
- You cannot leave a space between numbers on a gridded response.

Use this gridded response as a "guide" to help you fill in the boxes in your booklet.


-
/
.
0
1
2
3
4
5
6
7
8
9