

7th Grade Accelerated Summer Math Packet

1. What is the mean?

5 4 2 8 6 11 3 7 12

Comparing and Ordering Decimals

Copy and complete the statement using $<$, $>$, or $=$.

2. 0.4 ___ 0.42 3. 0.23 ___ 0.230 4. 37.2 ___ 37.19

5. Express $\frac{3}{8}$ as a decimal.

6. Which expression shows how the distributive property can be used to multiply 8×29 ?

A $8(20) + 8(9)$ C $29(8)$
B $8 + 20 \cdot 8 + 9$ D $8(20) + 9$

7. Seven out of 12 people say they will vote for Mrs. Meekus. If 144 people vote, how many are likely to vote for Mrs. Meekus?

8. What is the missing value in $\frac{2}{5} = \frac{x}{30}$?

9. Use the data in the table to write an equation for the function.

A $y = 2x - 1$
B $y = 3x + 4$
C $y = 6x - 2$
D $y = 5x + 3$

x	y
-2	-2
2	10
4	16

Adding and Subtracting Decimals

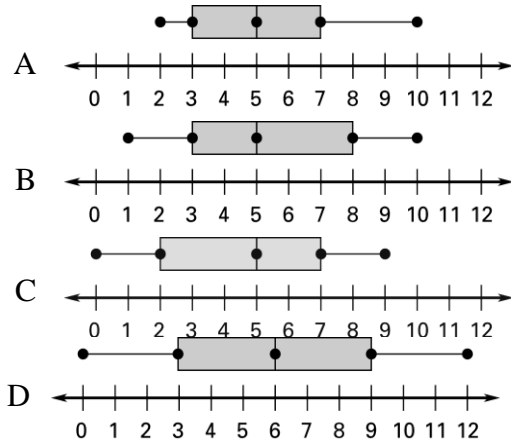
Find the sum or difference.

10. $4.21 - 2.1$

11. $9.24 - 2.351$

12. $5.1 + 2$

13. Which is the correct box-and-whisker plot for the data set **0, 4, 5, 9, 2, 7, 6**?



14. Evaluate $3x - 9$ for $x = 8$.

15. Simplify 3^4

16. Simplify $4 \cdot 5 - 2 \cdot 6 + 4$.

17. In what quadrant is the point $(3, -4)$ located?

A I

C III

B II

D IV

18. Which shows an expression for “the sum of 3 times a number and 5”?

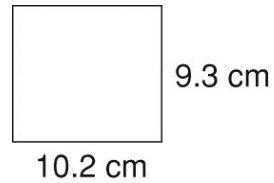
A $3x + 5$

C $5 + x$

B $5x + 3$

D $2x + 5$

19. Find the perimeter of the figure shown.



Multiplying and Dividing Decimals

Find the product or quotient.

20. 2.3×6.1

21. $2.55 \div 0.5$

22. $1.4 \div 2$

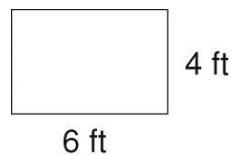
23. 4.1×0.52

24. $\frac{4}{5} = \frac{?}{10}$

25. Simplify the expression
 $3^2 \times (8 - 3) + 8$.

26. What is $\frac{7}{21}$ in simplest form?

27. What is the area of the figure shown?



28. $7(10 + 7) = 7(10) + 7(7)$ is an example of which property?

- A Commutative C Associative
B Distributive D Reflexive

29. Which of the following decimals has the greatest value?

- A 0.0014 C 0.014
B 0.0104 D 0.14

Mixed Numbers and Improper Fractions

Write the mixed number as an improper fraction and the improper fraction as mixed numbers

30. $8\frac{2}{5}$

31. $4\frac{3}{7}$

32. $\frac{48}{5}$

33. $\frac{78}{9}$

Adding and Subtracting Fractions

Find the sum or difference.

34. $\frac{7}{8} - \frac{5}{8}$

35. $\frac{7}{8} - \frac{1}{4}$

36. $\frac{7}{8} + \frac{2}{8}$

37. $\frac{5}{6} + \frac{3}{4}$

Multiplying and dividing Fractions and Whole Numbers

Find the product.

38. $5 \cdot \frac{3}{10}$

39. $5 \div \frac{3}{10}$

40. $\frac{3}{8} \cdot 10$

41. What is the missing value in $\frac{3}{n} = \frac{24}{40}$?

Percents

Express each decimal as a percent and percent as a decimal.

42. 0.42 43. 0.375 44. 21%

45. What is 25% of 500?

46. 30 is what percent of 150?

47. 12 is 40% of what number?

48. Which set of numbers is in order from greatest to least?

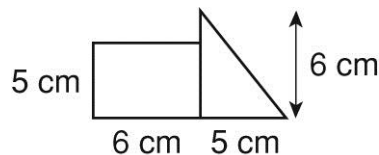
A $\frac{3}{4}$; 18%; 0.72

C 70%, 0.68, $\frac{2}{3}$

B 21%; $\frac{1}{5}$; 0.24

D 0.72; 86%; $\frac{7}{8}$

49. Find the area of the figure.



A 45 cm^2

C 126 cm^2

B 64.5 cm^2

D 144 cm^2

50. Which set of integers is in order from greatest to least?

A 6, 7, -2, 0

B 9, 8, -2, -4

C -7, -5, -2, 3

D 2, -4, 8, -9

51) Which algebraic expression means “three times the sum of a number and 8”?

- A $3(x + 8)$ C $3 + x + 8$
B $3x + 8$ D $(8 + 3)x$

52) Which equation best represents the function described below?

“The school has three times as many male teachers as female teachers.”

- A $3m = f$ C $m = 3f$
B $m = f + 3$ D $m = \frac{f}{3}$

53) Which is a solution to $x - 9 = 16$?

- A $x = 10$ C $x = 25$
B $x = 12$ D $x = 7$

54) Solve: $14 + (-4) - (-34)$

55) Rick earned \$112 for 8 hours of work. At this rate, how much will he earn for 40 hours of work?

56) Find the slope given the ordered pairs (1,0) and (2, -3)

For 57 and 58 evaluate each expression.

57) $6t - 5k$ for $t = 5$ and $k = 3$

58) $\frac{x+y}{2x-y}$ for $x = 18$ and $y = 33$.