

Sixth Grade Summer Math Packet

*This packet is for ALL students entering
7th grade in the fall.*

*Completion of this review packet is required.
It will be counted as a 100 point assignment based on
completion of all problems with work shown.*

Calculator use is not permitted.

*The packet will be collected by the student's math teacher
by the end of the first full week of school in September.*

Student name _____

6th Grade Summer Math Packet

Multiple Choice

Identify the choice that best completes the statement or answers the question.

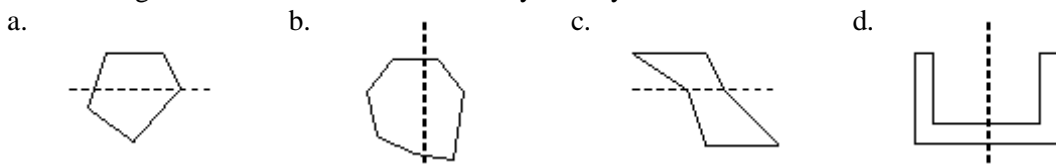
Write the decimal in words.

- ___ 1. 15.034
- a. fifteen and thirty-four thousands
 - b. fifteen and thirty-four hundredths
 - c. fifteen and thirty-four hundreds
 - d. fifteen and thirty-four thousandths
- ___ 2. What is the standard form of twenty-two ten thousandths?
- a. 0.22
 - b. 0.2200
 - c. 0.002
 - d. 0.0022
- ___ 3. One of the performers at the circus is Zachary, the Human Cannonball. On Saturday he does three shows. His distances measure 9.2 meters, 15.5 meters, and 16.8 meters. What is the total distance Zachary flies that day?
- a. 40.6 m
 - b. 41.5 m
 - c. 40.9 m
 - d. 41.8 m
- ___ 4. Which numbers are all divisible by 5?
- a. 124, 333, 315, 266, 391
 - b. 135, 205, 330, 275, 365
 - c. 135, 211, 330, 274, 252
 - d. 232, 250, 365, 225, 210

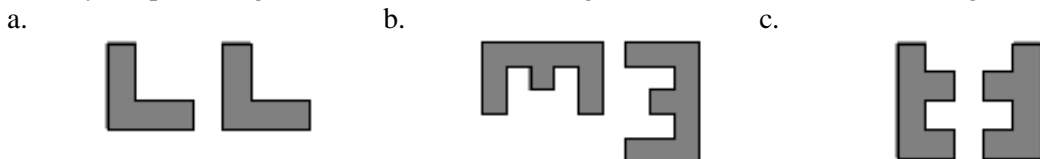
Identify the fraction that is equivalent to the given fraction.

- ___ 5. $\frac{4}{7}$
- a. $\frac{16}{28}$
 - b. $\frac{20}{28}$
 - c. $\frac{16}{21}$
 - d. $\frac{12}{28}$

- ___ 6. In which figure is the dashed line a line of symmetry?



- ___ 7. Identify the pair of figures in which the second figure is a translation of the first figure.



- ___ 8. What is a reasonable distance between two cities?

a. 200 km b. 200 m c. 200 cm d. 200 mm

- ___ 14. Lupe is a helper in the school library. She wants to arrange the books on her cart in order from greatest to least book number. If the numbers on the books are 325.39, 326.3, 326.15, and 326.48, in what order should she arrange them?
- a. 325.39, 326.15, 326.3, 326.48 c. 325.39, 326.3, 326.15, 326.48
 b. 326.48, 326.3, 326.15, 325.39 d. 326.3, 326.15, 325.39, 326.48

Find the product.

- ___ 15. 1.7×4
 a. 8.5 b. 10.8 c. 6.8 d. 5.7
- ___ 16. $0.3(0.002)$
 a. 0.006 b. 0.09 c. 0.009 d. 0.06
- ___ 17. $8\frac{2}{5} \times 5\frac{1}{2}$
 a. $46\frac{1}{5}$ b. $40\frac{1}{5}$ c. 40 d. $40\frac{2}{5}$

- ___ 18. Franklin bought 3 pencils for \$0.79 each, 2 notebooks for \$3.29 each, and a comic book for \$1.29. How much change will he receive from \$20?
 a. \$11.05 b. \$10.24 c. \$9.76 d. \$12.76
- ___ 19. Pork chops cost \$3.30 a pound at the market. Mary buys 4.4 pounds. Find the cost.
 a. \$7.70 b. \$18.92 c. \$15.52 d. \$14.52

Use mental math to find the product.

- ___ 20. $4(2 \cdot 1.5)$
 a. 12 b. 13 c. 12.5 d. 14

Find the quotient.

- ___ 21. $227.8 \div 17$
 a. 244.8 b. 13.4 c. 246.3 d. 14.9
- ___ 22. $6.3 \overline{)18.27}$
 a. 2.3 b. 0.34 c. 3 d. 2.9
- ___ 23. $\frac{4}{7} \div \frac{7}{8}$
 a. $\frac{1}{2}$ b. $\frac{32}{49}$ c. 2 d. $\frac{17}{32}$

Find the value of the expression.

- ___ 24. $10 \times 4 + 16 \div 4$
 a. 60 b. 14 c. 44 d. 50

- ___ 25. The table shows swimmers' times in a race. Which student swam the race the fastest?

SWIM RACE RESULTS

Student	Time (seconds)
Chris	35.46
Pedro	36.84
Michael	36.01
John	35.09

- a. Pedro b. Chris c. Michael d. John

Find the mean of the data set. If necessary, round to the nearest tenth.

- ___ 26. 18, 14, 8, 22, 25, 8
a. 15.8 b. 14.8 c. 16.1 d. 17.3

Find the median of the data set.

- ___ 27. 3, 35, 23, 37, 45, 5, 49, 27, 48
a. 35 b. 34 c. 30.2 d. 38

- ___ 28. A shop owner wants to market a new vest. The vest distributor will charge a reduced price for one size of the owner's choice. The owner knows that the size selected should be the mode of the sizes the shop sells. In one typical day, the shop owner sold the following sizes of vests:

40, 41, 41, 44, 44, 37, 38, 42, 41, 39, 44, 39, 37, 44, 42

Find the mode of the sizes?

- a. 44 b. 40.9 c. 42 d. 46
- ___ 29. Thirteen bowlers were asked what their score was on their last game. The scores are shown below.

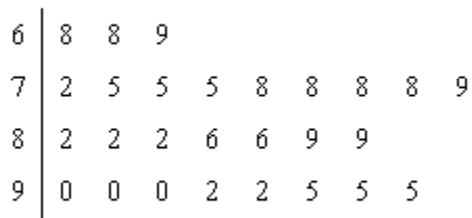
190, 150, 154, 194, 182, 190, 170, 151, 190, 170, 178, 161, 180

Find the range of the bowlers' scores.

- a. 56 b. 44 c. 34 d. 23

The stem-and-leaf plot shows the test scores of a science class. Use it to answer the questions.

Science Test Scores



Key: 8|2 means 82

- ___ 30. How many students scored 78?
a. 1 student b. 2 students c. 3 students d. 4 students
- ___ 31. What is the median of the data?
a. 23 b. 78 c. 82 d. 82.5
- ___ 32. Which number is composite?
53, 81, 41, 47, 31
a. 41 b. 81 c. 31 d. 47

Write the next two terms in the pattern.

- ___ 33. 11, 18, 25, 32, . . .
a. 42, 49 b. 39, 46 c. 38, 45 d. 40, 48

Evaluate the expression.

- ___ 34. $43 - 3m$ for $m = 6$
a. 25 b. 40 c. 46 d. 61

List all the factors of the number.

- ___ 35. 48
a. 1, 2, 3, 7, 8, 12, 48 c. 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
b. 2, 3, 4, 6, 8, 16, 24 d. 2, 3, 4, 6, 8, 9, 12, 16, 24

Find the prime factorization of the number.

- ___ 36. 168
a. $2^4 \times 3 \times 7$ c. $2^4 \times 3^3 \times 13$
b. $2^3 \times 3 \times 7$ d. $2^3 \times 3^3 \times 7$

Find the GCF of the numbers.

- ___ 37. 140, 180
a. 20 b. 90 c. 30 d. 10

Write the fraction in simplest form.

- ___ 38. $\frac{224}{360}$
a. $\frac{28}{46}$ b. $\frac{27}{45}$ c. $\frac{28}{45}$ d. $\frac{27}{46}$
- ___ 39. By the age of 27, Justin had visited 25 out of the 50 states. What fraction of the states had Justin visited? Write the answer in simplest form.
a. $\frac{2}{1}$ b. $\frac{25}{50}$ c. $\frac{1}{2}$ d. $\frac{1}{3}$
- ___ 40. Write $3\frac{1}{3}$ as an improper fraction.
a. $\frac{11}{3}$ b. $\frac{9}{3}$ c. $\frac{10}{3}$ d. $\frac{7}{3}$
- ___ 41. A truck's engine needs $3\frac{1}{4}$ gallons of oil for an oil change. How many quarts of oil are needed?
(Hint: 1 quart = $\frac{1}{4}$ gallon)
a. 65 quarts b. 18 quarts c. 13 quarts d. 4 quarts

Find the LCM of the numbers.

- ___ 42. 3, 11, 12
a. 396 b. 33 c. 132 d. 264

Compare the pair of numbers. Use <, =, or >.

- ___ 43. $\frac{3}{4} \square \frac{33}{40}$
a. $\frac{3}{4} > \frac{33}{40}$ b. $\frac{3}{4} < \frac{33}{40}$ c. $\frac{3}{4} = \frac{33}{40}$
- ___ 44. $3\frac{7}{21} \square 3\frac{1}{3}$
a. $3\frac{7}{21} > 3\frac{1}{3}$ b. $3\frac{7}{21} = 3\frac{1}{3}$ c. $3\frac{7}{21} < 3\frac{1}{3}$

Write the decimal as a fraction or mixed number in simplest form.

- ___ 45. 0.176
a. $\frac{22}{25}$ b. $\frac{20}{25}$ c. $\frac{20}{125}$ d. $\frac{22}{125}$

Write the fraction as a decimal.

46. $\frac{8}{25}$
a. 0.3 b. 1.4 c. 0.32 d. 0.68

Order the numbers from least to greatest.

47. $\frac{3}{8}, \frac{19}{24}, \frac{2}{3}$
a. $\frac{2}{3} < \frac{19}{24} < \frac{3}{8}$ c. $\frac{3}{8} < \frac{19}{24} < \frac{2}{3}$
b. $\frac{2}{3} < \frac{3}{8} < \frac{19}{24}$ d. $\frac{3}{8} < \frac{2}{3} < \frac{19}{24}$

48. $0.75, 0.3125, \frac{3}{8}, \frac{9}{16}$
a. $\frac{3}{8}, 0.75, 0.3125, \frac{9}{16}$ c. $0.3125, \frac{9}{16}, 0.75, \frac{3}{8}$
b. $0.3125, \frac{3}{8}, \frac{9}{16}, 0.75$ d. $\frac{3}{8}, \frac{9}{16}, 0.75, 0.3125$

Find the sum.

49. $\frac{4}{7} + \frac{2}{7}$
a. $\frac{6}{7}$ b. $\frac{5}{7}$ c. $\frac{7}{6}$ d. $\frac{5}{6}$
50. $\frac{1}{2} + \frac{3}{8}$
a. $\frac{1}{2}$ b. $\frac{3}{4}$ c. $\frac{7}{8}$ d. $\frac{4}{10}$
51. $-8 + (-2)$
a. -10 b. -6 c. 10 d. 6

Find the difference.

52. $\frac{9}{14} - \frac{5}{14}$
a. $\frac{4}{7}$ b. $\frac{2}{7}$ c. $\frac{4}{0}$ d. $\frac{12}{7}$
53. $\frac{4}{9} - \frac{1}{3}$
a. $\frac{10}{9}$ b. $\frac{1}{9}$ c. $\frac{1}{3}$ d. $\frac{4}{3}$

- ___ 54. $15 - 8$
 a. -23 b. 23 c. 7 d. -7
- ___ 55. $-8 - (-7)$
 a. -15 b. 1 c. 15 d. -1

Find the product. Simplify.

- ___ 56. $\frac{1}{10} \times \frac{3}{4}$
 a. $\frac{15}{2}$ b. $\frac{2}{15}$ c. $\frac{3}{40}$ d. $\frac{40}{3}$
- ___ 57. Find the reciprocal of $\frac{9}{11}$.
 a. 9 b. 11 c. $\frac{2}{11}$ d. $\frac{11}{9}$
- ___ 58. Write two different ratios equal to $6 : 18$.
 a. $\frac{7}{18}, \frac{1}{4}$ b. $\frac{6}{18}, \frac{1}{3}$ c. $\frac{7}{18}, \frac{1}{3}$ d. $\frac{6}{18}, \frac{1}{4}$
- ___ 59. Write the ratio $81 : 9$ in simplest form.
 a. $9 : 1$ b. $1 : 9$ c. $1 : 10$ d. $10 : 1$

Find the value that makes the ratios equal.

- ___ 60. $\frac{27}{90} = \frac{3}{?}$
 a. 3 b. 10 c. 9 d. 27

Find the unit rate for the situation.

- ___ 61. 360 km in 6 h
 a. 60 km/h b. 120 km/h c. 62 km/h d. 61 km/h
- ___ 62. \$5.20 for 8 cans
 a. \$.55 per can b. \$.60 per can c. \$.65 per can d. \$.70 per can
- ___ 63. A scale drawing of a town park has a scale of 2 inches : 300 feet. What is the actual length of each foot in the drawing?
 a. 450 ft b. 900 ft c. 1,800 ft d. 3,600 ft

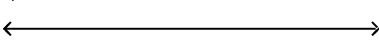
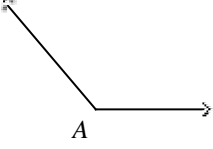
Write the percent as a decimal.

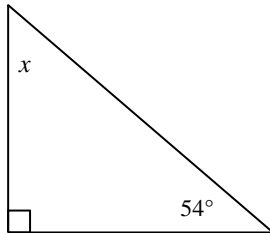
- ___ 64. 4%
 a. 0.004 b. 0.04 c. 0.4 d. 4

Write the decimal or fraction as a percent.

- ___ 65. $\frac{3}{5}$
a. 60% b. 600% c. 200% d. 20%
- ___ 66. $\frac{2}{30}$
a. $0.0\bar{6}\%$ b. $0.00\bar{5}\%$ c. $0.\bar{6}\%$ d. $0.0\bar{5}\%$
- ___ 67. Use a decimal to find 74% of 22.
a. 0.96 b. 9.6 c. 16.28 d. 1.628

Classify the angle as *acute*, *right*, *obtuse*, or *straight*.

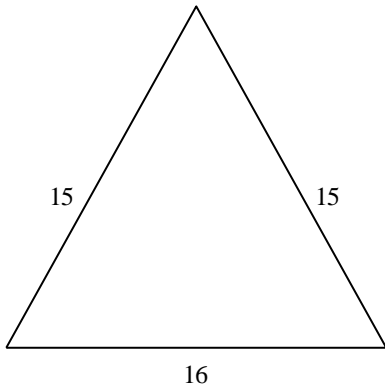
- ___ 68. The measure of angle A is 124° .
a. acute b. straight c. right d. obtuse
- ___ 69. 
a. obtuse b. right c. straight d. acute
- ___ 70. 
a. straight b. acute c. right d. obtuse
- ___ 71. Find the measures of the complement and the supplement of an angle with measure 50° .
a. complement, 130° ; supplement, 40°
b. complement, 40° ; supplement, 130°
c. complement, 140° ; supplement, 230°
d. complement, 230° ; supplement, 140°
- ___ 72. Find the value of x in the triangle.



Not drawn to scale

- a. 126° b. 234° c. 36° d. 144°

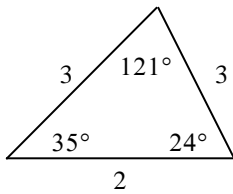
___ 73. Classify the triangle by its sides.



Not drawn to scale

- a. scalene b. equilateral c. isosceles

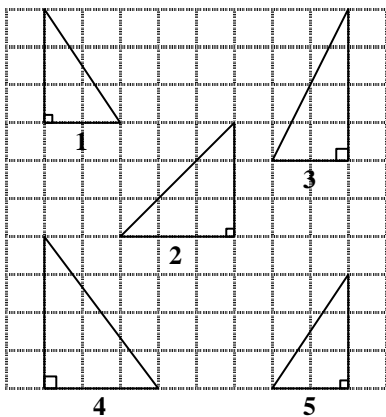
___ 74. Name the triangle by its angles and its sides.



Not drawn to scale

- a. isosceles, acute c. isosceles, obtuse
b. scalene, acute d. scalene, obtuse

___ 75. Which figures appear to be congruent?



- a. 1, 4 b. 1, 4, and 5 c. 1 and 5 d. 4 and 5

Choose an appropriate metric unit for the length.

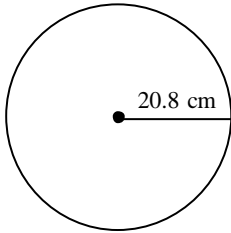
- ___ 76. height of a chair
a. kilometer b. meter c. centigram d. millimeter

Complete the statement.

- ___ 77. $6,501.5 \text{ km} = \square \text{ m}$
a. 6,501,500 b. 65,015 c. 650,150,000 d. 650.15
- ___ 78. When the temperature is 68°F , the speed of sound in air is approximately 343 meters per second. Approximately how many kilometers does sound travel in one second?
a. 34.3 m b. 3.43 km c. 0.343 km d. 0.0343 km
- ___ 79. Find the perimeter of the rectangle with length 97 inches and width 17 inches.
a. 228 in. b. 211 in. c. 1,649 in. d. 114 in.
- ___ 80. Find the area of the rectangle with length 27 inches and width 40 inches.
a. 67 in.^2 b. 134 in.^2 c. $1,080 \text{ in.}^2$ d. $10,800 \text{ in.}^2$

Find the missing length for a circle.

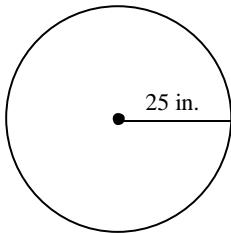
- ___ 81. What is the diameter of the circle?



- a. 10.4 cm b. 6.9 cm c. 62.4 cm d. 41.6 cm

Find the circumference of the circle with the given radius or diameter. Round to the nearest unit.

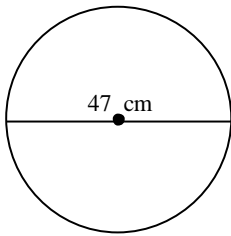
- ___ 82.



- a. 28 in. b. 79 in. c. 1,963 in. d. 157 in.

Find the area of the circle to the nearest tenth.

83.



- a. $6,939.8 \text{ cm}^2$ b. 73.8 cm^2 c. 147.7 cm^2 d. $1,734.9 \text{ cm}^2$

84. A single, standard number cube is tossed. What is the probability of getting a number other than 9?

- a. 1 b. $\frac{1}{3}$ c. $\frac{5}{6}$ d. $\frac{1}{6}$

85. Tamara likes to mix and match her 4 scarves, 3 pairs of gloves, and 2 hats. The colors are in the table On Monday, she randomly picks out a scarf, hat, and a pair of gloves. What is the probability of Tamara choosing a pair of brown gloves and a red hat?

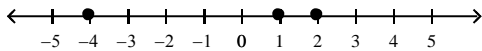
Scarf	Gloves	Hat
Red	Black	White
White	Brown	Red
Brown	Red	
Black		

- a. $\frac{1}{4}$ b. $\frac{1}{8}$ c. $\frac{1}{10}$ d. $\frac{1}{6}$

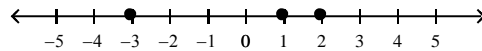
86. Graph the integers on a number line.

-4, 2, 1

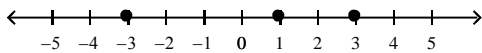
a.



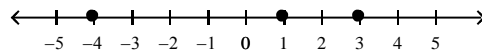
c.



b.



d.



87. Use an integer to represent 49°F below zero.

- a. 49 b. -48 c. -49 d. 48

Name the opposite of the integer.

88. 7

- a. $-\frac{1}{7}$ b. $\frac{1}{7}$ c. -7 d. 7

Compare. Use $<$, $=$, or $>$.

___ 89. $11 \square -7$

a. $>$

b. $=$

c. $<$

___ 90. Order the integers from least to greatest.

6, 11, 16, -8, -5

a. 16, 11, 6, -5, -8

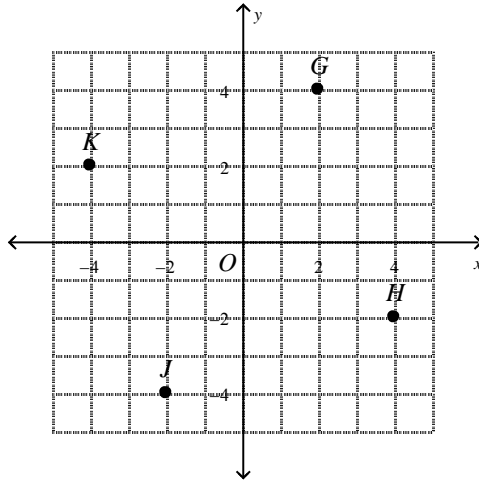
c. -5, -8, 16, 6, 11

b. -8, -5, 6, 11, 16

d. 11, 6, -8, -5, 16

___ 91. Name the point with the given coordinates.

$(-4, 2)$



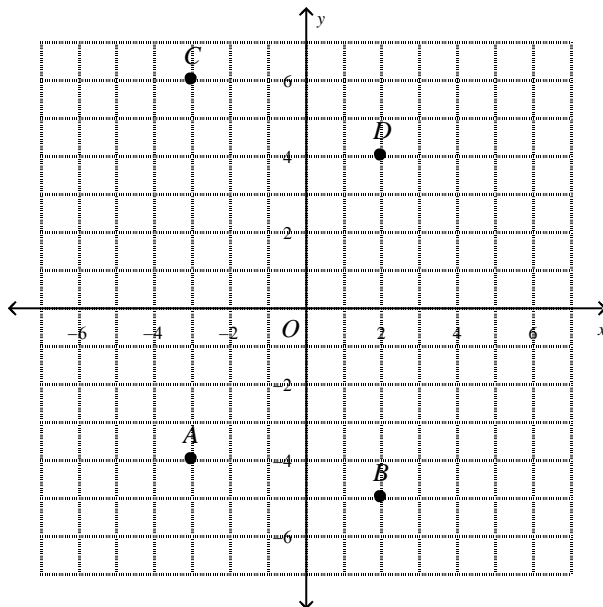
a. *H*

b. *K*

c. *J*

d. *G*

___ 92. Name the coordinates of point *D*.



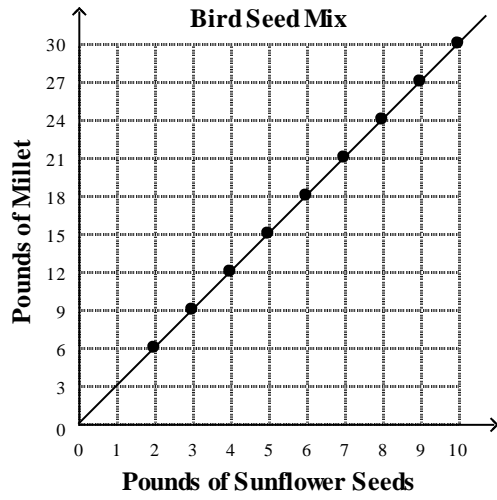
a. $(-3, -4)$

b. $(2, 4)$

c. $(-3, 6)$

d. $(2, -5)$

93. Luisa is mixing bird seed. If Luisa has 4 pounds of sunflower seeds, how many pounds of millet should she add, according to the graph below?



- a. 8 pounds b. 15 pounds c. 10 pounds d. 12 pounds