Name: _____ Class: _____ Date: _____ Score: _____ ID: A

6th : Take Home Exercises

1.

--------Day 1--------

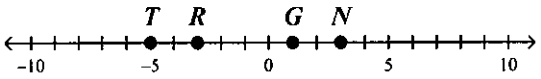
Write as an integer:

gain of 8 points

a. –8
b. –18
c. 18
d. 8

2. Which expression has the greatest value?
a. |10|
b. |4|
c. |–16|
d. |6|

3. Which point is the correct graph of the number –3?



a. N
b. R
c. T
d. G

4. Which number is the greatest?
a. 3
b. –1
c. 9
d. –4

5. Which list of values is in order from greatest to least?
a. –9, – 8, – 2, 4
b. –9, – 2, – 8, 4
c. 4, – 8, – 2, – 9
d. 4, – 2, – 8, – 9

6. Compute: –1 + (–23)
a. 24
b. –22
c. 22
d. –24

7. Compute: 27 + (–28) + (–43)
a. 12
b. 44
c. –44
d. –12

8. Compute: –22 – (–40)
a. 62
b. –18
c. 18
d. –62

9. Compute: –2 – 15
a. –17
b. –13
c. 17
d. 13

10. Compute: $\frac{|32|}{|-4|}$
a. –8
b. –9
c. 9
d. 8

11. Write 160,000,000 in exponential form.
a. $5^2 \bullet 10^8$
b. $5^2 \bullet 10^7$
c. $4^2 \bullet 10^7$
d. $4^2 \bullet 10^8$

12. Simplify: $10^1 \bullet 10^3$
a. 10^4
b. 100^4
c. 10^3
d. 100^3

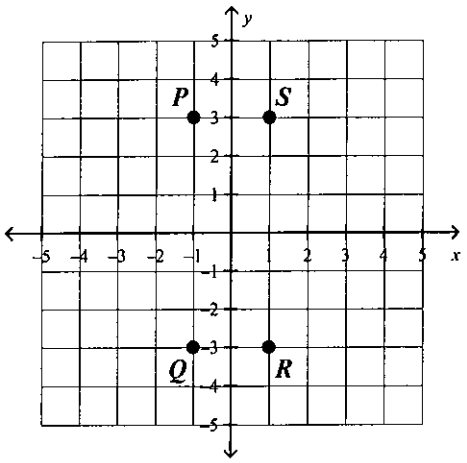
13. Simplify:

$\frac{9^8}{9^2}$

a. 9^{16}
b. 9^6
c. 9^{10}
d. 9^4

Name: _____ **ID: A**

14. Which point has coordinates (1, –3)?



a. S
b. P
c. Q
d. R

15. In which quadrant is (–2, –2) located on the coordinate plane?
a. II
b. I
c. III
d. IV

16. Find the opposite of –44.

_____

17. Compute: $-5+45$

_____

18. Compute: $-9 \bullet |-4|$

_____

19. Write 10^2 in standard form.

_____

20. Evaluate the expression.

$33 \div (3+8 \bullet 1)+5$

_____

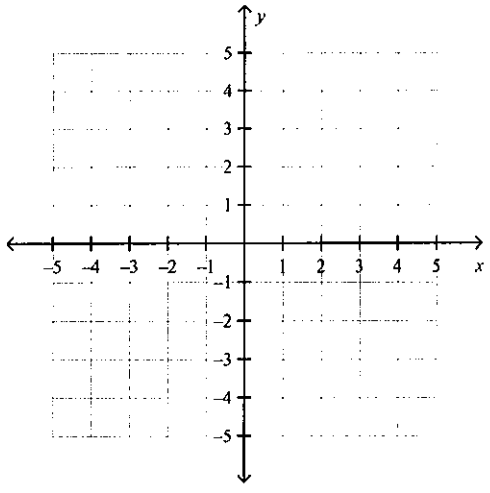
21. Simplify the expression.

$6^2 - 90 \div 3^2$

_____

22. Graph and connect the points on the coordinate plane.

$A(0,4), B(-1,-2), C(1,-2)$



23.

--------Day 2--------

Write the algebraic expression for:
a number n times the sum of nineteen and twenty.

a. $n(19+20)$
b. $\frac{1}{n}(19+20)$
c. $n(19-20)$
d. $\frac{1}{n}(19-20)$

24. Write a word phrase for: $-20-2$.
a. The difference between negative twenty and two
b. The difference between twenty and two
c. The sum of negative twenty and two
d. The sum of twenty and two

25. Write a word phrase for: $\frac{-4-x}{2}$
a. The sum of four and x divided by two
b. The difference between four and x divided by two
c. The sum of negative four and x divided by two
d. The difference between negative four and x divided by two

26. Bob jogs each day. Today he plans to increase his jog by 18 minutes. Let t represent the number of minutes Bob jogs on a normal day. Write an algebraic expression to represent how much he will jog today.
a. $t-18$
b. $\frac{t}{18}$
c. $18t$
d. $t+18$

27. Mrs. Ortega is planning a party for her daughter. She plans to order 2 balloons for each guest. She also plans to order 24 extra balloons. Let g represent the number of guests. Write an algebraic expression to represent how many balloons she will need to order.
a. $2g+24$
b. $24g+2$
c. $2(g+24)$
d. $24(2+g)$

28. Evaluate for $n = 5$.

$8n+n$

a. 45
b. 50
c. 75
d. 80

Simplify.

29. $mn+10mn-19$
a. $-9mn-19$
b. $-11mn-19$
c. $11mn-19$
d. $-8mn$

30. $-5(g+h)+10g$
a. $11g-5h$
b. $5g+h$
c. $5g-5h$
d. $-15g-5h$

31. Which equation is an algebraic equation?
a. $7-(-s)=12$
b. $-10^2+7=107$
c. $-10^3=-1000$
d. $7(12-2)=98$

32. Which equation is a numerical equation?
a. $-3^2+3=12$
b. $|-3|+c=6$
c. $-3^2+c^2=18$
d. $-3+3=c$

33. Which shows a given value that makes the sentence TRUE?
a. $-10w^2=199$ when $w=2$
b. $4w=8$ when $w=3$
c. $4w^2=8$ when $w=2$
d. $4w=8$ when $w=2$

34. Use the Subtraction Property of Equality to solve.

$-17+17+x+(-9)=9$

a. 16
b. 20
c. 18
d. -18

35. Using the formula for perimeter, find w when $P = 68$ mm and $l = 15$ mm.

The formula for for is $P = 2l + 2w$.

a. 29 mm
b. 18 mm
c. 24 mm
d. 19 mm

36. Use the Subtraction Property of Equality to solve.

$x + 54 = 247$

_____

37. Use the Addition Property of Equality to solve.

$z - 51 = 223$

_____

38. Use the Addition Property of Equality to solve.

$4^2 - 105 = y - 535$

_____

39. Use the Division Property of Equality to solve.

$20c = 580$

_____

40. Solve:

$27 - \frac{d}{4} = 22$

_____

Solve and check.

41. $28x + 2x = -11 - 19$

_____

42.

--------Day 3 --------

$\frac{t}{-12} = 28$

_____

Simplify. Leave your answer in exponential form.

43. $8^1 \times 8^6$
a. 8^6
b. 64^7
c. 8^5
d. 8^7

Simplify:

44. $\left(g^7\right)^6$
a. g^{42}
b. g^{13}
c. $g^{6/7}$
d. $g^{7/6}$

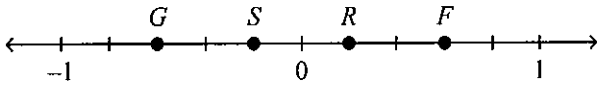
45. $d \cdot d^9 \cdot d^6$

_____

46. Which of the following is NOT a rational number?
a. $0.\overline{89}$
b. -7
c. $-3\frac{3}{11}$
d. $\sqrt{2}$

47. Which decimal is repeating?
a. 9.373
b. 9.213
c. 0.357357...
d. 1.984

48. Which point represents 0.2 on the number line?



a. R
b. S
c. G
d. F

49. Compare these numbers. Write <, =, or >.

-0.65 ____ -0.645

a. $-0.65 < -0.645$
b. $-0.65 > -0.645$
c. $-0.65 = -0.645$
d. $-0.65 + -0.645$

50. Add.

$26.843 + 16.696$

a. 10.147
b. 46.639
c. 39.929
d. 43.539

51. Subtract.

$9.51 - 14.997$

a. −2.587
b. −5.487
c. 24.507
d. −11.69

52. Multiply.

$$\begin{array}{r} 8.6 \\ \times\ 0.2 \\ \hline \end{array}$$

a. −1.72
b. −7.34
c. 1.72
d. 0.5

53. Estimate the product by rounding.

39.86×11.08

a. 440
b. 360
c. 495
d. 400

54. Estimate the quotient by using compatible numbers.

$47.235 \div 5.89$

a. 8
b. 6
c. 5
d. 10

55. Estimate the quotient by using compatible numbers.

$36.264 \div 0.608$

a. 60
b. 48
c. 600
d. 480

56. Estimate the quotient by using powers of 10 and compatible numbers.

$0.1096 \div 0.0111$

a. 0.01
b. 100
c. 1
d. 10

57. Find the quotient.

$-243 \div 8.1$

a. –15
b. 30
c. –30
d. –35

58. Express 10^{-5} as a decimal.
a. 100,000
b. 0.000001
c. 0.0001
d. 0.00001

59. Express 0.125 as a power with a negative exponent.
a. 4^{-2}
b. 2^{-2}
c. 2^{-3}
d. 4^{-3}

60. Write 700,000 in scientific notation.
a. 7×10^4
b. 70×10^4
c. 0.7×10^6
d. 7×10^5

61. Write 5.76×10^5 in standard form.
a. 576,000
b. 5,760,000
c. 0.0000576
d. 57,600

62. Compare. Write <, =, or >.

8×10^4 ____ 3.77×10^7

a. >
b. =
c. <
d. +

63. Solve and check the subtraction equation.

$x - 8.31 = -5.357$

a. –13.667
b. 14.743
c. –2.953
d. 2.953

64. Solve and check the multiplication equation.

$9.9n = -84.15$

a. –94.05
b. –8.5
c. –8
d. –9.9

65. Solve and check the division equation.

$\frac{k}{5.9} = 4.2$

a. 24.78
b. 10.1
c. –1.7
d. 27.26

66. Solve. Check your answer.

$33m + 25 = 31.6$

a. –2.2
b. 2.7
c. 0.2
d. 1.7

67.

--------Day 4--------

Rename the unit of length.

70 dm = ____ m

a. 0.07
b. 0.7
c. 700
d. 7

68.

Rename the unit of mass.

870 cg = ____ dag

a. 8700
b. 0.87
c. 87
d. 870

69. Rename the unit of capacity.

5000 dL = ____ kL

a. 5
b. 50 000
c. 0.5
d. 5000

70. Estimate the difference by rounding each number to the nearest tenth.

$39.16 - 4.17$

_____

71. Add.

$18.13 + (-29.1) + 28.17$

_____

72. Multiply.

$3.1(7.3)(5.2)$

_____

73. Evaluate: $\frac{a}{b} + c$, when $a = -1.44$, $b = -0.18$, and $c = 8.2$.

_____

74. Solve and check the addition equation.

$x + 6.66 = -3.5$

_____

75. Write 0.625 as an equivalent fraction.

_____

76. Which is the prime factorization of 70?

a. $3 \times 2 \times 7$
b. $2 \times 5 \times 3$
c. 2×35
d. $2 \times 5 \times 7$

77. Write $\frac{15}{20}$ in simplest form.

a. $\frac{3}{4}$
b. $\frac{15}{20}$
c. $\frac{2}{4}$
d. $\frac{3}{20}$

78. Which statement shows two fractions that are equivalent to $\frac{4}{20}$?
    a. $\frac{4}{20} = \frac{1}{20} = \frac{8}{38}$
    b. $\frac{4}{20} = \frac{1}{5} = \frac{8}{40}$
    c. $\frac{4}{20} = \frac{1}{18} = \frac{8}{38}$
    d. $\frac{4}{20} = \frac{1}{20} = \frac{4}{40}$

79. Find the LCM of 12, 4 and 2.
    a. 12
    b. 10
    c. 6
    d. 4

80. Tell whether $\frac{37}{63}$ is closest to -1, $-\frac{1}{2}$, 0, $\frac{1}{2}$, or 1.
    a. $-\frac{1}{2}$
    b. 1
    c. $\frac{1}{2}$
    d. -1

81. Compare. Write >, =, or <.

    $\frac{-1}{6}$ ____ $\frac{4}{9}$

    a. $\frac{-1}{6} > \frac{4}{9}$
    b. $\frac{-1}{6} = \frac{4}{9}$
    c. $\frac{-1}{6} < \frac{4}{9}$

82. Compare. Write >, =, or <.

    $\frac{3}{5}$ ____ –0.389

    a. $\frac{3}{5} > -0.389$
    b. $\frac{3}{5} = -0.389$
    c. $\frac{3}{5} < -0.389$

83. Rename $\frac{1}{8}$ and $\frac{2}{9}$ as fractions with a common denominator.
    a. $\frac{1}{72}$ and $\frac{2}{72}$
    b. $\frac{9}{17}$ and $\frac{16}{17}$
    c. $\frac{25}{72}$
    d. $\frac{9}{72}$ and $\frac{16}{72}$

84. Rename $2\frac{2}{11}$ as a fraction greater than 1.
    a. $\frac{4}{22}$
    b. $\frac{4}{11}$
    c. $\frac{24}{11}$
    d. $\frac{4}{11}$

85. Rename $\frac{49}{12}$ as a mixed number.
    a. $7\frac{1}{12}$
    b. $5\frac{1}{12}$
    c. $49\frac{1}{12}$
    d. $4\frac{1}{12}$

86. Multiply. Express your answer in simplest form.

    $\frac{1}{9} \bullet -10$

    a. -1
    b. $1\frac{1}{9}$
    c. $-1\frac{1}{9}$
    d. 1

87.

--------Day 5--------

Evaluate *a(b)* when a = $\frac{-4}{11}$ and b = $\frac{4}{5}$

a. $\frac{-16}{16}$

b. $\frac{16}{16}$

c. $\frac{-16}{55}$

d. $\frac{16}{55}$

88.

Multiply and express the product in simplest form.

$(\frac{1}{2})(1\frac{1}{2})$

a. $\frac{3}{4}$

b. $-1\frac{1}{4}$

c. $-\frac{3}{4}$

d. $1\frac{1}{4}$

89. Divide. Write the quotient in simplest form.

$-5\frac{3}{4} \div -1\frac{1}{5}$

a. $-6\frac{9}{10}$

b. $4\frac{19}{24}$

c. $-4\frac{19}{24}$

d. $6\frac{9}{10}$

90. Solve. Check to justify your answer.

$\frac{-2}{4} = p + \frac{4}{5}$

a. $\frac{2}{5}$

b. $\frac{3}{10}$

c. $-1\frac{3}{10}$

d. $-\frac{2}{5}$

91. Solve. Check to justify your answer.

$\frac{-2}{5}q = 1$

a. $\frac{3}{5}$

b. $-2\frac{1}{2}$

c. $1\frac{2}{5}$

d. $-\frac{3}{5}$

92. Rename the unit of measure.

39600 in. = ____ mi

a. $\frac{3}{8}$

b. $\frac{1}{2}$

c. $\frac{5}{8}$

d. $\frac{3}{4}$

93. Rename the unit of measure.

5 pt = ____ gal

a. $\frac{1}{2}$

b. $\frac{3}{4}$

c. $\frac{7}{8}$

d. $\frac{5}{8}$

94. Rename the unit of measure.

4000 lb = ____ T

a. $2\frac{1}{2}$
b. 2
c. 3
d. $1\frac{1}{2}$

95. Use prime factorization. Find the GCF of 27, 33 and 12.

_____

96. Find the difference. Express your answer in lowest terms.

$\frac{-4}{7} - \frac{1}{3}$

_____

97. Write $\frac{-8}{9} \bullet \frac{-1}{3}$ in simplest form.

_____

98. Write $\frac{-7}{9} \div \frac{-2}{3}$ in simplest form.

_____

99. Compute. Write each unit of measure in lowest terms.

(7 qt 1 pt) + (6 gal 1 qt 1 pt)

_____

100. Use cross products to compare these fractions. Write >, =, or <.

$\frac{12}{17}$ —— $\frac{-3}{13}$

_____

101. Write the ratio in a different form.

28:44

a. 44:28
b. $\frac{28}{44}$
c. 56:88
d. $\frac{28}{88}$

102. Write an equivalent ratio.

44 to 38

a. 22 to 19
b. 38 to 44
c. $\frac{19}{22}$
d. $\frac{44}{38}$

103. Express the ratio in its simplest form.

96:45

a. 32:15
b. 45:32
c. 15:32
d. 96:15

104. Write the phrase as a ratio: Ruben counts 125 cars in 8 minutes.

a. 8 cars to 125 minutes
b. 125 cars to 8 minutes
c. 8 minutes to 125 minutes
d. 125 minutes to 8 cars

105. Find the best buy.

a. 2 grams at $2.60
b. 3 grams at $3.75
c. 4 grams at $5.60
d. 5 grams at $6.75

106.

--------Day 6--------

Compare the rates. Which is the lowest rate?
a. 8 liters at $10.80
b. 7 liters at $12.95
c. 5 liters at $8.00
d. 6 liters at $6.60

107. Find the missing term in the proportion.

$$\frac{n}{10.2} = \frac{7}{20.4}$$

a. 0.3
b. 3.5
c. 5.5
d. 71.4

108.

What is the length of a walkway, *w*, that measures 1.5 in. on a scale drawing? Use the scale below.

Scale
1 in. = 4 ft

a. 6 ft
b. 5.3 ft
c. 0.4 ft
d. 6.8 ft

109. A building measuring 35 ft on each side has a scale model on display. The scale factor used to build the model is $\frac{1\text{ in.}}{7\text{ ft}}$. How long is each side of the scale model, in inches?

110. Rename 2% as a ratio in simplest form.
a. $\frac{1}{50}$
b. $\frac{1}{2}$
c. $\frac{1}{100}$
d. $\frac{1}{25}$

111. Rename 7 : 25 as a percent.
a. 7%
b. 28%
c. 14%
d. $\frac{7}{25}\%$

112. Rename 80% as a fraction in simplest form.
a. $\frac{1}{80}$
b. $\frac{80}{100}$
c. $\frac{8}{10}$
d. $\frac{4}{5}$

113. Rename 75% as a decimal.
a. 0.075
b. 0.75
c. 7.5
d. 75

114. Write $\frac{5}{8}$ as a percent.
a. $62\frac{1}{2}\%$
b. $31\frac{1}{4}\%$
c. 0.625%
d. $\frac{5}{8}\%$

115. Write 0.94 as a percent.
a. 94%
b. 940%
c. 0.94%
d. 9.4%

116. Compare: 0.7 ____ $\frac{3}{5}$
a. =
b. >
c. <

117. Write 7.1 as a percent.
a. 7100%
b. 71%
c. 710%
d. 0.71%

118. Write $\frac{21}{10}$ as a percent.
   a. 210%
   b. 0.21%
   c. 21%
   d. 2100%

119. Write 669% as a decimal.
   a. 66.9
   b. 0.669
   c. 6690
   d. 6.69

120. Write 0.76% as a decimal.
   a. 0.76
   b. 0.0076
   c. 7.6
   d. 0.076

121. Write 670% as a fraction or mixed number in simplest form.
   a. $\frac{670}{100}$
   b. 67
   c. $6\frac{79}{100}$
   d. $6\frac{7}{10}$

122. Write 0.66% as a fraction in simplest form.
   a. $\frac{7}{1000}$
   b. $\frac{3}{50}$
   c. $\frac{0.66}{100}$
   d. $\frac{33}{5000}$

123. Use the percent formula to find 49.5% of 310.
   a. 1534.5
   b. 15.345
   c. 153.45
   d. 15,345

124. Use a percent proportion to find 55% of 145.
   a. 7.975
   b. 797.5
   c. 79.75
   d. 7975

125. What percent of 70 is 49?
   a. 3430%
   b. 70%
   c. 0.7%
   d. 142.86%

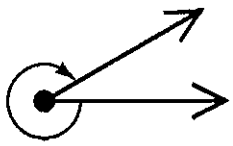
126. Use the percent formula or a proportion to solve: 20% of what number is 33?
   a. 165
   b. 1.65
   c. 6.6
   d. 0.61

127. What number is 45% of 63?
   a. 1.4
   b. 28.35
   c. 0.7
   d. 2835

128. 39 is 26% of what number?
   a. 150
   b. 65
   c. 10.14
   d. 1.5

129. Find the selling price of a bicycle which costs $620 and sells at a loss of 25%.
   a. $595.00
   b. $403.00
   c. $465.00
   d. $155.00

130. Classify this angle.

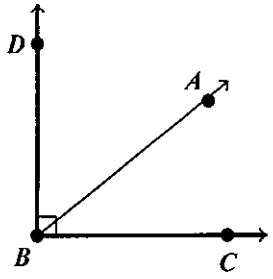


   a. Reflex
   b. Acute
   c. Right
   d. Obtuse

131.

--------Day 7--------

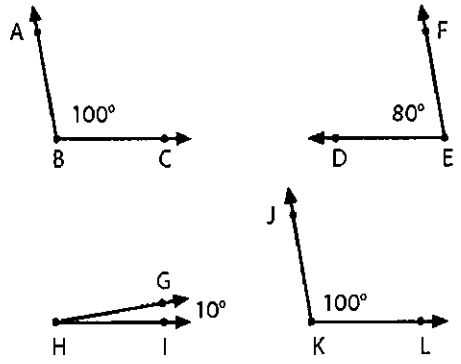
Estimate the measure of $\angle ABC$ and identify whether the angle is acute or obtuse.



a. 80° acute
b. 40° acute
c. 40° obtuse
d. 80° obtuse

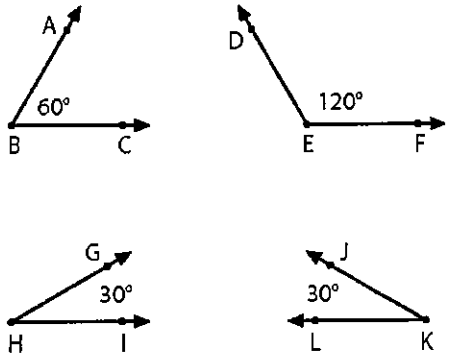
132.

Identify a pair of complementary angles.



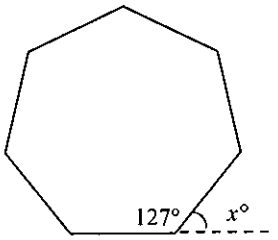
a. $\angle ABC$ and $\angle JKL$
b. $\angle DEF$ and $\angle GHI$
c. $\angle ABC$ and $\angle DEF$
d. $\angle GHI$ and $\angle JKL$

133. Identify a pair of supplementary angles.



a. ∠ABC and ∠DEF
b. ∠DEF and ∠JKL
c. ∠GHI and ∠JKL
d. ∠ABC and ∠GHI

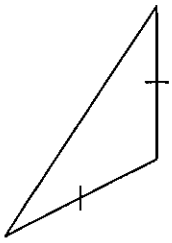
134. Find the measure of the exterior angle.



a. 37°
b. 23°
c. 73°
d. 53°

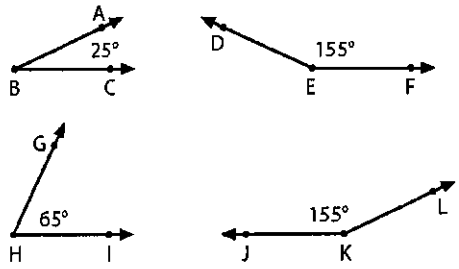
135. Find the sum of the angle measures of a regular heptagon.
a. 900°
b. 720°
c. 450°
d. 1080°

136. Classify the triangle according to its sides.



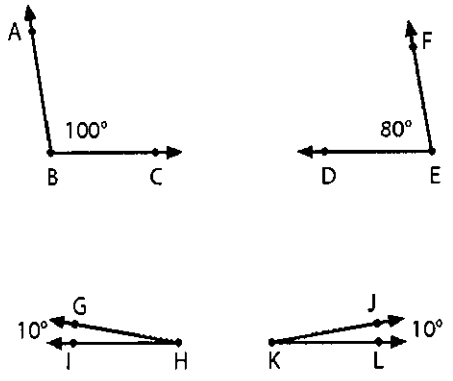
a. equilateral
b. scalene
c. isosceles
d. right

137. Identify a pair of complementary angles.



a. $\angle ABC$ and $\angle GHI$
b. $\angle DEF$ and $\angle JKL$
c. $\angle ABC$ and $\angle JKL$
d. $\angle GHI$ and $\angle JKL$

138. Identify a pair of supplementary angles.



a. ∠GHI and ∠JKL
b. ∠DEF and ∠GHI
c. ∠ABC and ∠DEF
d. ∠ABC and ∠JKL

139. What is the greatest possible error (GPE) of 32.5 in.?
a. 1 in.
b. $\frac{1}{2}$ in.
c. $\frac{1}{4}$ in.
d. $\frac{1}{4}$ ft

140. Find the relative error of 2 lb to the nearest tenth of a percent.
a. 50%
b. 0.1%
c. 25%
d. 12.5%

141. Which is the least precise measure?

12.58 ft 5.7 ft 2 ft 2.546 ft

a. 2 ft
b. 12.58 ft
c. 2.546 ft
d. 5.7 ft

142. A regular hexagon has a perimeter of 150 in.. What is the measure of each side?
a. 25 in.
b. 24 in.
c. 27 in.
d. 26 in.

143. Simplify. $\sqrt{12^2 + 35^2} - 20$
a. 37
b. −13.1
c. 57
d. 17

144. Simplify. $\sqrt{784} + \sqrt{676 - 100} - 24$
a. 28
b. 44
c. 31.9
d. 20

145. Solve. $\sqrt{3025}$
a. 55
b. 1512.5
c. 56
d. 28

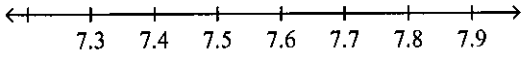
146.

--------Day 8--------

What is the negative square root of 3136?
a. –28
b. –56
c. 56
d. –1568

147.

Between what two numbers on the number line would $\sqrt{56}$ be located?



a. 7.3 and 7.4
b. 7.4 and 7.5
c. 7.5 and 7.6
d. 7.6 and 7.7

148. Approximate $\sqrt{31}$ to the nearest whole number.
a. 6
b. 5
c. 4
d. 7

149. Which of the following given side lengths is a right triangle?
a. 16 in., 12 in., 20 in.
b. 16 in., 12 in., 21 in.
c. 11 in., 16 in., 20 in.
d. 16 in., 20 in., 21 in.

150. A parallelogram has a base of 9 ft and a height of 8 ft. What would the area of the parallelogram be if the base were tripled?
a. 216 ft^2
b. 52 ft^2
c. 243 ft^2
d. 72 ft^2

151. A parallelogram has a base of 15 cm and a height of 2 cm. What would the area of the parallelogram be if the height were tripled?
a. 38 cm^2
b. 90 cm^2
c. 96 cm^2
d. 30 cm^2

152. A parallelogram has a height of 10 cm and an area of 400 cm^2. What is the length of the base?
a. 190 cm
b. 41 cm
c. 20 cm
d. 40 cm

153. Find the area of a parallelogram with a base of 16 yd and a height of 35 yd.
a. 51 yd^2
b. 280 yd^2
c. 102 yd^2
d. 560 yd^2

154. A parallelogram has a base of 9 ft and a height of 5 ft. Find the area of the parallelogram in square inches.
a. 540 $in.^2$
b. 45 $in.^2$
c. 28 $in.^2$
d. 6480 $in.^2$

155. What is the area of a triangle with a base of 18 in. and a height of 39 in.?
a. 57 $in.^2$
b. 351 $in.^2$
c. 175.5 $in.^2$
d. 702 $in.^2$

156. A triangle has an area of 207 mm^2 and a height of 23 mm. What is the base?
a. 9 mm
b. 184 mm
c. 196 mm
d. 18 mm

157. A trapezoid has an area of 276 cm^2 and a height of 12 cm. If one base measures 29 cm, what is the measure of the other base?
a. 52 cm
b. 46 cm
c. 11.5 cm
d. 17 cm

Simplify:

158. $3 + 3(3 + 4)^3$
a. 1032
b. 9264
c. 2058
d. 91

159. Evaluate $\frac{qr}{q+r}$ when $q = 8$ and $r = 13$.

a. 1
b. $\frac{104}{21}$
c. $\frac{813}{21}$
d. $\frac{39}{7}$

160. Simplify $7 \times 7 + 15 - 6 \div 2$.
a. 50
b. 61
c. 53.5
d. 29

161. Evaluate the expression $n \times 3 + 27 \div 3$, given $n = 3$.
a. 12
b. 36
c. 18
d. 30

162. Simplify $\left(7 \cdot 6^2 - 7 \cdot 3^2\right) \div (4 + 3)$.
a. 27
b. 243
c. 189
d. 261

Simplify:

163. $4 \bullet 3^2 - 9$

_____

164. Evaluate $5 + 9 \bullet 3 - 18 \div 2$.

_____

165. Evaluate the expression $8.2x - 6.1$ when $x = 7$.

_____

166. Evaluate the expression $7.8\,x - 17.2$ when $x = 5$.

_____

167. Evaluate the expression $2x^3 - 14$ when $x = 2$.

_____

168. Evaluate $6y + 7 - 3x$ when $y = 3$ and $x = 4$.

_____

169. Evaluate $8s + 5 - 5t$ when $s = 5$ and $t = 7$.

_____

170. Evaluate $5j$ when $j = 7$.
a. 35
b. 40
c. 12
d. 84

171. Evaluate $3p$ when $p = 2$.

_____

172. Evaluate the expression x^3 when $x = 6$.

173. Brandon read 360 words in 12 minutes. How many words could he read in one minute?
a. 40 words
b. 372 words
c. 42 words
d. 30 words

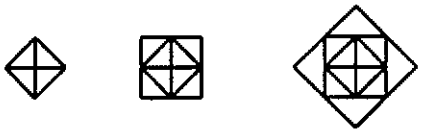
174.

--------Day 9--------

You rode your bicycle for 30 minutes and burned 190 calories. How many calories did you burn per minute?

a. 220 calories per minute
b. 220.053 calories per minute
c. 7.33333 calories per minute
d. 6.33333 calories per minute

175. If the pattern shown is continued, what would be the total number of triangles in the ninth stage of the pattern?



4 $4 + 4 = 8$ $4 + 4 + 4 = 12$

a. 36
b. 144
c. 180
d. 40

176. It is known that a cyclist can travel 41.4 miles in 3 hours. At that rate, how far can the same cyclist travel in 7 hours?

a. 95.2 miles
b. 97.8 miles
c. 96.6 miles
d. 97.4 miles

177. Write a variable expression for "7 times the sum of x and 5."

_____

178. Write an expression for "three less than five times a number x."

_____

179. Write an expression for "five less than three times a number x."

_____

180. Write an expression for "three times the difference of a number x and 5."

_____

181. A man buys 7 shirts at $16.50 each. Find his total bill.

_____

182. Which of the numbers 6, 7, or 8 is the solution of $109 = 116 - x$?

a. not given
b. 6
c. 7
d. 8

183. Which number is the solution of $64 = 74 - x$?

a. 10
b. 11
c. 9
d. 8

184. Use a number line to find the sum. $-4 + (-13)$

a. 9
b. –17
c. –9
d. 17

185. Use a number line to find the sum. $-20 + 2$

_____

Find the difference.

186. $-99 - 85$

a. –14
b. –184
c. 184
d. 14

187. $(-10) - (-7)$

Evaluate.

188. $-(-4) - (-5) + 6$
   a. 3
   b. –3
   c. 5
   d. 15

Find the change in temperature.

189. From –13°C to 15°C
   a. –28°C
   b. 2°C
   c. –2°C
   d. 28°C

190. Evaluate the expression $17 - (-x) - |-10|$ when $x = 3$.

_____

191. The morning temperature was –2°. By noon, the temperature was 1°. What was the change in temperature?

_____

Find the product.

192. –3 (8)
   a. 5
   b. –24
   c. –11
   d. 24

193. (–7)(5)(6)
   a. –210
   b. 210
   c. –4
   d. 4

194. 2(–5)

_____

195. Identify the product that will be negative.
   a. (2)(3)(4)(5)
   b. (–2)(–3)(–4)(–5)
   c. (2)(–3)(–4)(5)
   d. (–2)(–3)(–4)(5)

196. Find the product 8|–10|.

_____

197. Find the product (–8)|–10|.

_____

Simplify the expression.

198. $10(-2c)$

_____

199. $4(6x)$

_____

Use the distributive property to write an equivalent expression.

200. $2(x + 7)$
   a. $2x + 14$
   b. $2x + 7$
   c. $9x + 7$
   d. $2x - 14$

201. $5(9x - 5y)$
   a. $45x - 25y$
   b. $45x + 25y$
   c. $45x - 5y$
   d. $9x - 5y$

202. $-4(x - 4)$
   a. $-4x - 4$
   b. $-4x + 16$
   c. $-4x - 16$
   d. $-4x + 4$

203. Simplify the expression $8x + 4 + 2x - 7$.
   a. $10x - 3$
   b. $6x - 3$
   c. $10x + 11$
   d. $6x + 11$