Geometry
Chapter 1 Review

ALWAYS KEEP!!!

Name:_____

1. 1 foot (ft) = _____ inches (in)

2. 1 centimeter (cm) = _____ millimeters (mm)

3. 1 yard (yd) = _____ feet (ft)

4. 1 meter (m) = _____ centimeters (cm)

5. 1 mile (mi) = _____ feet (ft)

6. 1 kilometer (km) = _____ meters (m)

7. The distance around a two-dimensional object is called the _____.

8. A quantity that is measured in square units and expresses the size of a surface is called _____.

9. The formula for the area of a square or rectangle is _____ or _____.

10. The height of a triangle is always _____ to its base

11. The formula for the area of a triangle is _____.

12. The distance from the center of the circle to its edge is called the _____.

13. The distance across a circle passing through the center is the _____.

14. The perimeter of a circle is more specifically called the _____.

15. The symbol π is called ____, which is approximately equal to ($\approx$) _____.

16. The formula for the circumference of a circle is _____.

17. The formula for the area of a circle is _____.

18. A _____ has no dimension and is represented by a dot.

19. A _____ is one-dimensional and is always straight.

20. A _____is two-dimensional and is always flat.

21. Points are _____ if they lie on the same line.

22. Points are _____ if they lie on the same plane.

23. A _____ is a portion of a line consisting of two endpoints.

24. A _____ is a portion of a line that has one endpoint and extends into infinity in one direction.

25. Two geometric figures _____ or cross if they share one or more points in common.

26. Two lines are _____ if they are coplanar, but do not intersect.

27. Two lines are _____ if they intersect to form a right angle (90°) angle.

28. Two line are _____ if they are noncoplanar and do not intersect.

29. A _____ is a number that is only divisible by 1 and itself.

30. The first five primes are ___ , ___ , ___, ___, and ___.

31. The symbol $\sqrt{\ }$ is called a _____.

32. The most common radical in Geometry is the _____($\sqrt[2]{\ }$).

33. The _____ is a method used to simplify radicals.

34. A segment running left and right can be referred to as a _____ segment.

35. A segment running up and down can be referred to as a _____ segment.

36. You can NOT count the length of a segment that runs _____.

37. The distance formula is: _____.

38. _____ means to cut in half.

39. A _____ is a point on a segment that bisects the segment.

40. The symbol for an angle is ____.

41. The point where the two sides of an angle meet is called the _____.

42. The measure of an angle is written in units called _____.

43. An angle can have a measure between ____ and _____ degrees.

44. The four types of angle classifications are: _____, _____, _____ and _____.

45. The notation $m\angle ABC = 64°$ means _____.

46. In Geometry, the word _____ (Symbol: ____) roughly means to be equal.

47. _____ are used on a diagram to show segments are congruent.

48. _____ are used to show angles are congruent.

49. Two angles are _____ if their measures add up to 90°.

50. Two angles are _____ if their measures add up to 180°.

51. Two angles are _____ angles if their sides are formed by two intersecting lines, but they do not share a side in common. Vertical angles are _____ in measure.

52. Two angles are a _____ if they share a side in common and their non-common sides form a straight angle. Angles that form a linear pair are supplementary or add up to _____.

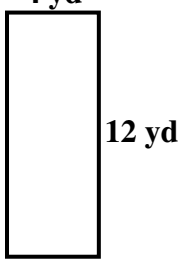
53. 6 ft = _____ yd

54. 98 in. = _____ ft

55. 2 mi = _____ ft

Find the perimeter and area of the figure.

56.



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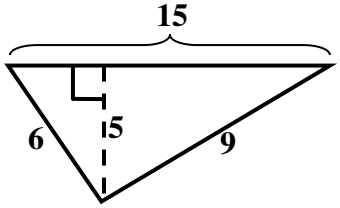

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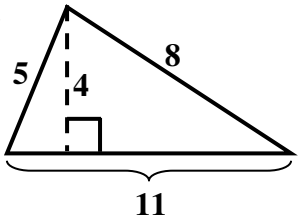

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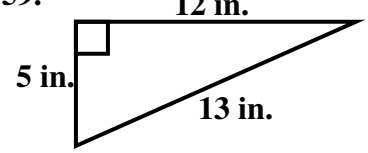

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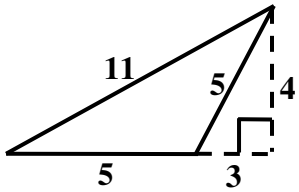

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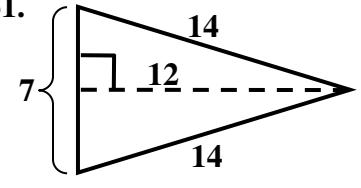
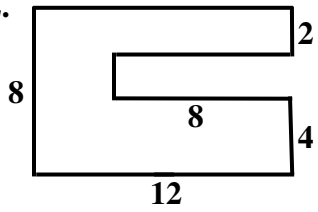


Find the perimeter and area of the figure.

62.



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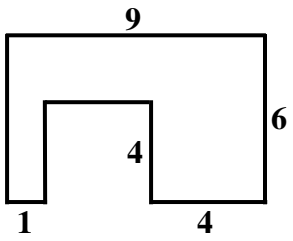

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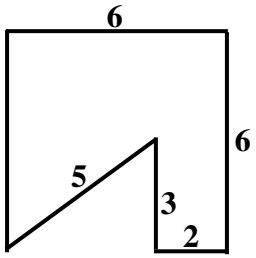
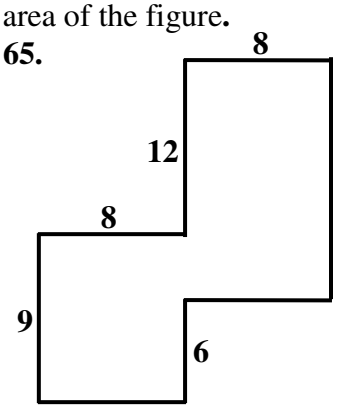


Find the perimeter and area of the figure**.**

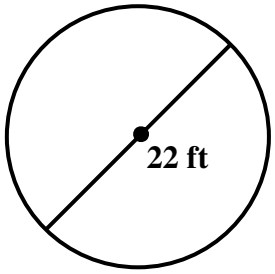
65.



Find the circumference and area of the circle for #66 and #67.

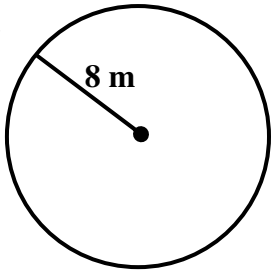
Leave answer in terms of π.

66.



Round to nearest tenth decimal place.

67.



68. The perimeter of a rectangle is 38 ft. and its length is 10 ft. Find the width.

69. The area of a rectangle is 63 $in.^2$ and its height is 7 in. What is the length of the base?

70. The area of a triangle is 48 m^2 and its base is 12 m. Find its height.

71. The area of a triangle is 18 ft^2 and its height is 9 ft. Find the base.

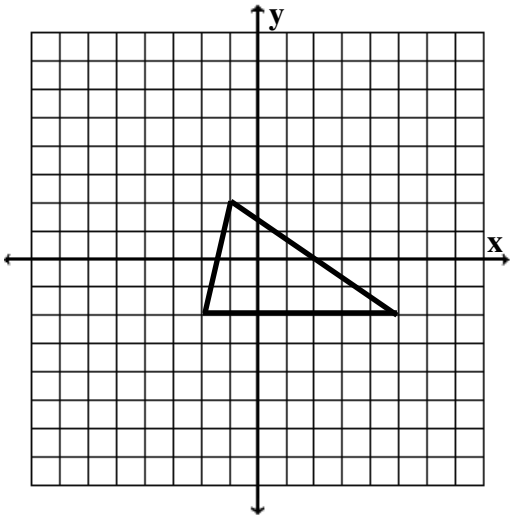
72. The circumference of a circle is 32π square units. What is the radius?

73. The area of a circle is 49π mi^2. Find its circumference.

74. How many square inches are there in 1 square foot.

Find the area of the figure on the coordinate plane.

75.

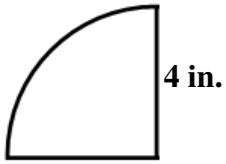


76. The length of a rectangle is three more than twice the width. Given the perimeter is 36 ft, find the dimensions (width and length) of the rectangle.

77. A sewing club is making a quilt consisting of 25 squares with each side of the square 30 centimeters. If the quilt has five rows and five columns, what is the perimeter of the quilt?

Find the area of the figure. Leave answer in terms of π.

78.



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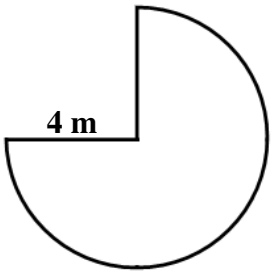
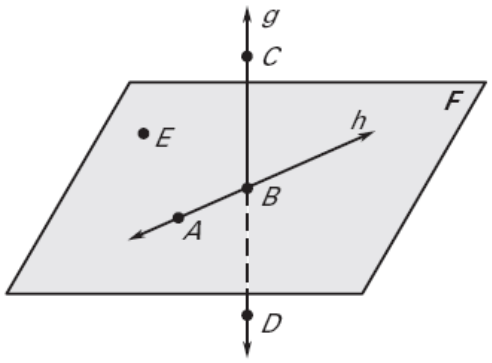


Use the diagram to the right to complete the following problems.



80. Give two other names for $\overleftrightarrow{AB}$.

81. Name three collinear points.

82. Give another name for plane F.

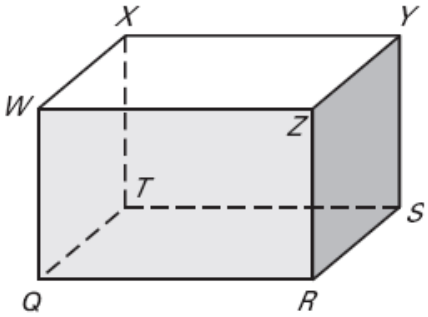
83. Give another name for $\overline{CD}$.

84. Name three rays with endpoint B.

85. Give another name for $\overrightarrow{CD}$.

86. Name the intersection of plane F and $\overleftrightarrow{CD}$.

The figure to the right is a right prism. Complete each statement with parallel, perpendicular, or skew.



87. $\overleftrightarrow{WQ}$ and $\overleftrightarrow{ZR}$ are _____.

88. $\overleftrightarrow{XY}$ and $\overleftrightarrow{YS}$ are _____.

89. $\overleftrightarrow{WZ}$ and $\overleftrightarrow{RS}$ are _____.

90. $\overleftrightarrow{QT}$ and $\overleftrightarrow{XT}$ are _____.

91. $\overleftrightarrow{WQ}$ and $\overleftrightarrow{TS}$ are _____.

92. $\overleftrightarrow{XY}$ and $\overleftrightarrow{TS}$ are _____.

93. $\overleftrightarrow{YZ}$ and $\overleftrightarrow{TQ}$ are _____.

94. Plane WXT and plane ZRS are _____.

95. Plane WXZ and plane XTS are _____.

96. Find the length of segment $\overline{XY}$ given the coordinates of its endpoints.

X(1, 7) Y(−2, 3)

97. Find the distance between the endpoints of $\overline{AB}$.

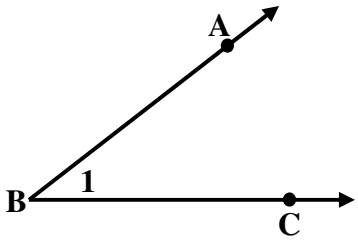
A(2, 3) B(4, −1)

98. Find the midpoint of $\overline{AB}$ given its endpoints.

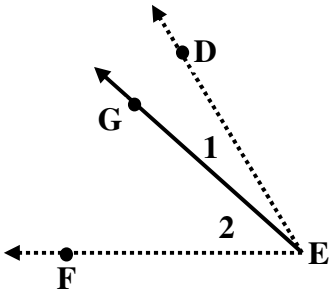
A(2, 4) B(−3, 6)

99. Given the midpoint $M\left(-\frac{5}{2}, 1\right)$ and an endpoint F(2, −1) of $\overline{FG}$, find the other endpoint.

100. State all the different names for the angle.

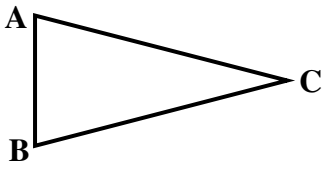


101. State all the different names for the dotted angle.

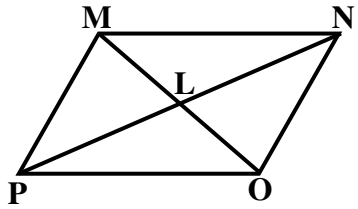


Shade the indicated angle.

102. ∠ACB

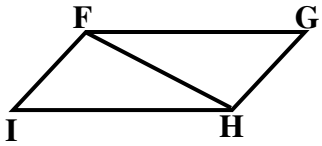


103. ∠MLP



Label the diagram.

104. ∠GFH ≅ ∠IHF



Classify each angle.

105. m∠ABC = 89°

106. m∠3 = 180°

107. m∠F = 90°

108. m∠XYZ = 152°

109. B is between point A and C. Find BC.

AB = 2x + 10

BC = x – 4

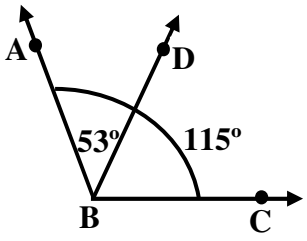
AC = 21

110. M is the midpoint $\overline{AB}$. Find AM.

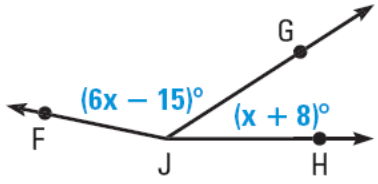
AM = x + 15

MB = 4x – 45

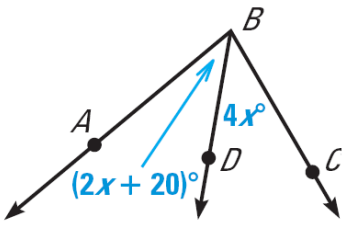
111. Find m∠DBC.



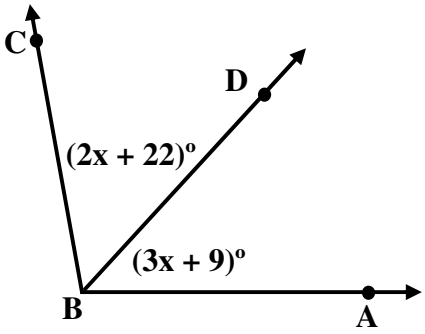
112. Given m∠FJH= 168°, find m∠FJG.



113. $\overrightarrow{BD}$ bisects ∠ABC. Find m∠ABC.



114. $\overrightarrow{BD}$ bisects ∠ABC. Find m∠ABC.



115. ∠C is a complement of ∠D. Find m∠C.

m∠C = (15x + 3)°

m∠D = (5x − 13)°

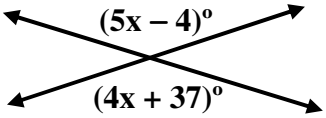
116. ∠A is a supplement of ∠B. Find m∠B.

m∠A = (6x + 72)°

m∠B = (2x + 28)°

Find the value of the variable(s).

117.



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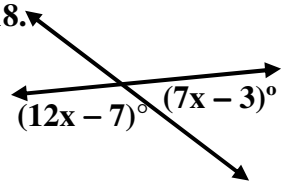

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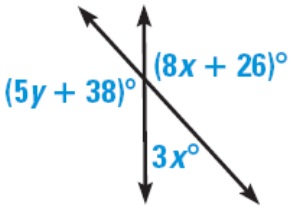

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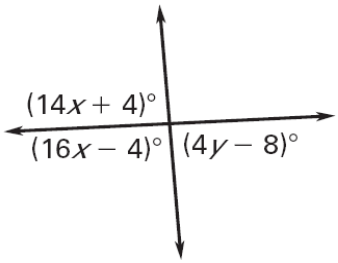


Answer Key:

1) 12 **2)** 10 **3)** 3 **4)** 100 **5)** 5,280 **6)** 1,000 **7)** perimeter **8)** area **9)** $A = bh$ or $A = \ell w$

10) perpendicular **11)** $A = \frac{bh}{2}$ **12)** radius **13)** diameter **14)** circumference **15)** pi, 3.14

16) $C = 2\pi r$ **17)** $A = \pi r^2$ **18)** point **19)** line **20)** plane **21)** collinear **22)** coplanar

23) segment **24)** ray **25)** intersect **26)** parallel **27)** perpendicular **28)** skew **29)** prime

30) 2, 3, 5, 7, and 11 **31)** radical **32)** square root **33)** prime factor tree

34) horizontal **35)** vertical **36)** diagonally **37)** $d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$ **38)** Bisect **39)** midpoint

40) $\angle$ **41)** vertex **42)** degrees **43)** 0° to 180° **44)** acute, obtuse, right, and straight

45) "The measure of angle ABC is 64 degrees."

46) congruent, $\cong$ **47)** Tick marks **48)** Arcs **49)** complementary **50)** supplementary **51)** vertical, equal

52) linear pair, 180° **53)** 2 yd **54)** $8\frac{1}{6}$ ft **55)** 10,560 ft **56)** $P = 32$ yd, $A = 48$ yd^2

57) $P = 30$ units, $A = 37.5$ units^2 **58)** $P = 24$ units, $A = 22$ units^2 **59)** $P = 30$ in., $A = 30$ in.^{2}

60) $P = 21$ units, $A = 10$ units^2 **61)** $P = 35$ units, $A = 42$ units^2 **62)** $P = 56$ units, $A = 80$ units^2

63) $P = 38$ units, $A = 38$ units^2 **64)** $P = 28$ units, $A = 30$ units^2 **65)** $P = 74$ units, $A = 192$ units^2

66) $C = 22\pi$ ft, $A = 121\pi$ ft^2 **67)** $C = 50.2$ m, $A = 201.0$ m^2 **68)** $w = 9$ ft **69)** $b = 9$ in.

70) $h = 8$ m **71)** $b = 4$ ft **72)** $r = 16$ units **73)** $C = 14\pi$ mi **74)** $A = 144$ in.^{2} **75)** $A = 14$ units

76) $w = 5$ ft, $\ell = 13$ ft **77)** $P = 600$ cm **78)** $A = 4\pi$ in.^{2} **79)** $A = 12\pi$ in.^{2} **80)** $\overleftrightarrow{BA}$, line h

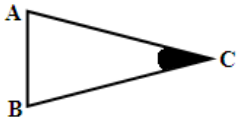
81) C, B, D **82)** Plane EAB **83)** $\overline{DC}$ **84)** $\overrightarrow{BC}, \overrightarrow{BA}, \overrightarrow{BD}$ **85)** $\overline{CB}$ **86)** B **87)** parallel ||

88) perpendicular $\perp$ **89)** skew **90)** perpendicular $\perp$ **91)** skew **92)** parallel ||

93) parallel || **94)** parallel || **95)** perpendicular $\perp$ **96)** XY = 5 **97)** $AB = 2\sqrt{5}$ **98)** $M\left(-\frac{1}{2}, 5\right)$

99) $G(-7, 3)$ **100)** $\angle 1$, $\angle B$, $\angle ABC$, $\angle CBA$ **101)** $\angle DEF$, $\angle FED$

102)



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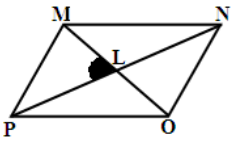

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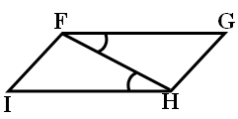

105) acute **106)** straight

107) right **108)** obtuse **109)** $BC = 1$ **110)** $AM = 35$ **111)** $m\angle DBC = 62°$ **112)** $m\angle FJG = 135°$

113) $m\angle ABC = 80°$ **114)** $m\angle ABC = 96°$ **115)** $m\angle C = 78°$ **116)** $m\angle B = 48°$ **117)** x= 41

118) $x = 10$ **119)** $x = 14, y = 20$ **120)** $x = 6, y = 24$