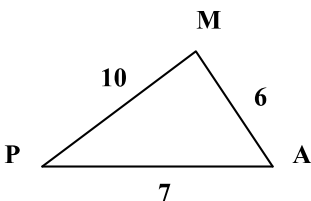
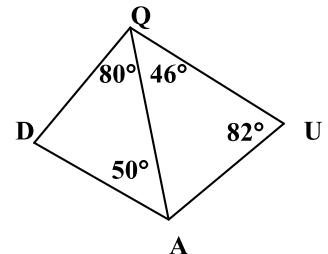
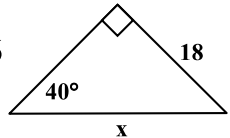
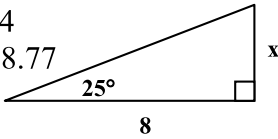
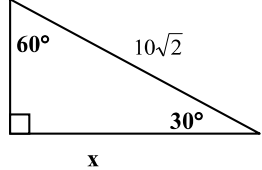
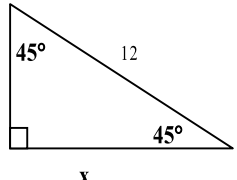


Pre-AP Geometry Spring Semester Review – 2014

Chapter 5

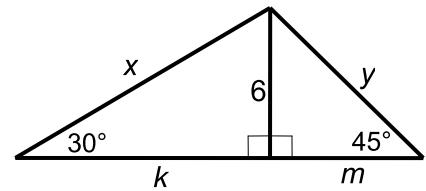
<p>1. In $\triangle PMA$, _____</p> <p>A. $m\angle P > m\angle A$ B. $m\angle P > m\angle M$ C. $m\angle A > m\angle P$ D. $m\angle M > m\angle A$</p>	
<p>2. Find the shortest side of the figure QUAD</p> <p>A. \overline{DQ} B. \overline{QU} C. \overline{UA} D. \overline{DA}</p>	
<p>3. In $\triangle EFG$, $m\angle E = 5x + 2$, $m\angle F = 6x - 10$, and $m\angle G = x + 20$. Choose the list that shows the sides correctly ordered from longest to shortest.</p> <p>A. $\overline{EG}, \overline{FE}, \overline{GF}$ B. $\overline{FE}, \overline{EG}, \overline{GF}$ C. $\overline{EG}, \overline{FG}, \overline{FE}$ D. $\overline{GF}, \overline{EG}, \overline{FE}$</p>	
<p>4. What type of triangle has sides that measure 12, 13, and 18?</p> <p>A. an obtuse triangle B. a right triangle C. an acute triangle D. a triangle cannot be formed using those lengths</p>	
<p>5. Determine which set of numbers can be the lengths of the sides of a triangle.</p> <p>A. 4, 10, 16 B. 4, 7, 11 C. 95, 102, 8 D. 5.5, 4.8, 12</p>	
<p>6. The lengths of two sides of a triangle are 8 and 15. The length of the third side is between:</p> <p>A. 8 and 15 B. 9 and 14 C. 9 and 22 D. 7 and 23</p>	

Chapter 8

<p>7. Find x.</p> <p>A. 25.46 B. 11.57 C. 36 D. 28</p>	
<p>9. Find x.</p> <p>A. 3.73 B. 4 C. 2 D. 8.77</p>	
<p>8. Find x.</p> <p>A. $5\sqrt{2}$ B. 10 C. $5\sqrt{6}$ D. $10\sqrt{2}$</p>	
<p>10. Find x.</p> <p>A. $3\sqrt{2}$ B. $6\sqrt{2}$ C. 6 D. $6\sqrt{3}$</p>	

11. Find x , y , k , and m .

$x =$ _____ $y =$ _____
 $k =$ _____ $m =$ _____



12. The altitude of an equilateral triangle is 6 cm long. Find the length of each side of the equilateral triangle.

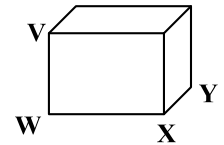
- A. $2\sqrt{3}$ cm B. $3\sqrt{2}$ cm C. $4\sqrt{3}$ cm D. 6 cm

13. One side of a square is s . Find a diagonal.

- A. $2\sqrt{s}$ B. $s\sqrt{2}$ C. $\frac{s}{2}\sqrt{3}$ D. $s\sqrt{3}$

14. $VW = 5$, $WX = 7$, and $XY = 13$. Find VY .

- A. $11\sqrt{2}$ B. $9\sqrt{3}$ C. $10\sqrt{2}$ D. $8\sqrt{3}$



15. What is the diameter of the largest circular tabletop that can be passed through a doorway 7 ft by 3 ft?

- A. 3 ft B. 7 ft C. 7.6 ft D. 8.1 ft E. 21 ft

16. The perimeter of an isosceles right triangle is $8 + 8\sqrt{2}$. Find the length of the hypotenuse.

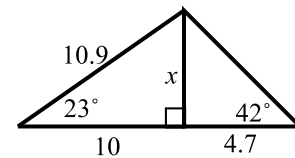
- A. 4 B. 8 C. $2\sqrt{2}$ D. $4\sqrt{2}$ E. $8\sqrt{2}$

17. A certain right triangle has an acute angle with a measure of x degrees. If $\cos x = \frac{5}{13}$, what does the $\tan x$ equal?

- A. $\frac{5}{12}$ B. $\frac{12}{5}$ C. $\frac{13}{5}$ D. none of these

18. Which equation could be used to find the value of x ?

- A. $\cos 67^\circ = \frac{x}{10.9}$ B. $\sin 23^\circ = \frac{x}{10}$
 C. $\cos 42^\circ = \frac{x}{4.7}$ D. $\tan 48^\circ = \frac{x}{4.7}$



19. A ladder 6 m long just reaches the top of a building and its foot makes a 76° angle with the ground. Which of the following equations could be used to calculate the height, h , of the building?

- I. $\sin 76^\circ = \frac{h}{6}$ II. $6\cos 14^\circ = h$ III. $\cos 76^\circ = \frac{h}{6}$

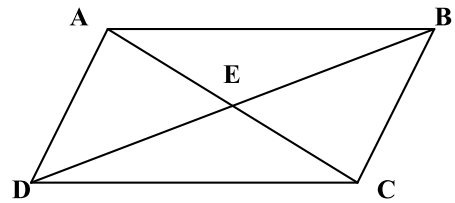
- A. I only B. II only C. III only D. I and II only
 E. I, II, and III

20. The angle of depression from the top of a 120 foot lighthouse looking down on a ship is 44° . How far is the ship from the lighthouse?
 A. 102.40 ft B. 172.56 ft C. 124.26 ft D. 144.02 ft
21. A cat sitting 10 yards from the bottom of a tree is looking up at a bird's nest. The angle of elevation is 70° . How high up in the tree is the nest?
 A. 85.46 yd B. 29.23 yd C. 27.47 yd D. 0.36397 yd
22. A treasure map gives the following directions: from the old stump take 30 paces east, 20 paces north, 6 paces west, and 25 paces north. How far from the old stump is the treasure?

Chapter 6

Use parallelogram ABCD for the next 4 questions.

23. $m\angle ADC = 62^\circ$, find $m\angle ABC$.
 A. 34° B. 118°
 C. 28° D. 62°

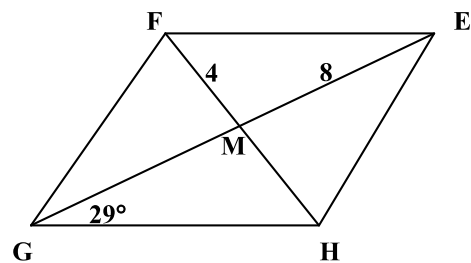


24. $AE = 3x$, $CE = 5x - 4$, and $BD = 10x$. Find DE.
 A. 2 B. 5
 C. 10 D. 20

25. $m\angle BAD = 2x + 10$ and $m\angle ADC = x + 20$. What is the measure of $\angle BCD$?
 A. 110° B. 70°
 C. 50° D. 20°

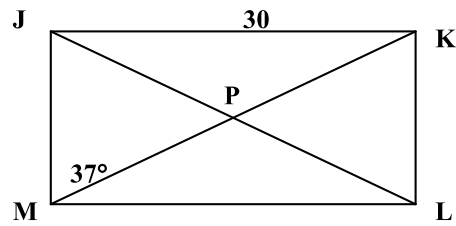
Use rhombus EFGH for the next 2 questions.

26. Find $m\angle FHE$
 A. 61° B. 29°
 C. 90° D. 45°
27. Find GH
 A. 12 B. $4\sqrt{5}$
 C. 10 D. $16\sqrt{5}$



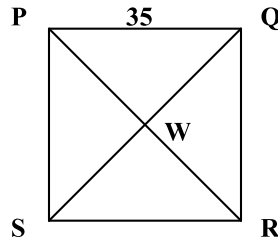
Use rectangle JKLM for the next 2 questions.

28. Find $m\angle JLK$
A. 37° B. 53°
C. 90° D. 48°
29. $KP = 5x - 4$, $PL = 2x + 17$, find x .
A. 31 B. 7
C. 21 D. 30



Use square PQRS for the next 2 questions.

30. $m\angle SQR = 5x - 5$. Find x .
A. 19 B. 10
C. 16 D. 78
31. SQ
A. 35 B. 49.5
C. 24.75 D. 39.67



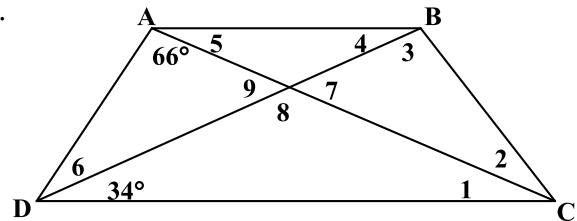
Use isosceles trapezoid TRAP for the following 2 questions.

32. $m\angle A$
A. 54° B. 126°
C. 78° D. 138°
33. XY is the median and
 $TR = 7x - 8$, $XY = 5x + 6$, $PA = 4x - 4$, find x .
A. 28 B. 20
C. 17 D. 24



Use isosceles trapezoid ABCD for the following question.

34. Find $m\angle 7$.
A. 68°
B. 34°
C. 112°
D. 56°



35. Both pairs of opposite sides of a quadrilateral are parallel. Which special kind of quadrilateral *must* it be?

- A. parallelogram B. rectangle C. rhombus D. trapezoid

36. The diagonals of a certain quadrilateral are equal. Which term could *not* be used to describe the quadrilateral?

- A. isosceles trapezoid B. rectangle C. rhombus D. square

37. A diagonal of a parallelogram bisects one of its angles. Which special kind of parallelogram *must* it be?

- A. rectangle B. rhombus C. square D. parallelogram with a 60° angle

38. If EFGH is a parallelogram, which of the following *must* be true?

- A. $m\angle E = m\angle F$ B. $m\angle F = m\angle H$
 C. $\overline{FG} \parallel \overline{GH}$ D. $m\angle E + m\angle G = 180^\circ$

39. Which information does *not* prove that quadrilateral ABCD is a parallelogram?

- A. \overline{AC} and \overline{BD} bisect each other. B. $\overline{AD} \parallel \overline{BC}$; $AD = BC$
 C. $\overline{AB} \parallel \overline{CD}$; $AD = BC$ D. $m\angle A = m\angle C$; $m\angle B = m\angle D$

40. A rhombus is also a square only if it is also a(n):

- A. Parallelogram B. Trapezoid C. Rectangle
 D. Equilateral Quadrilateral E. Convex Polygon

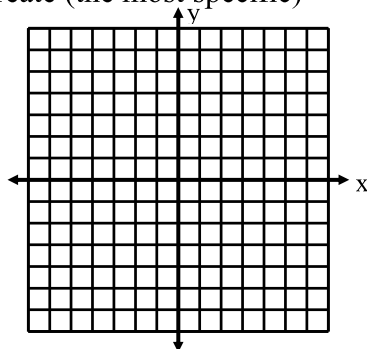
41. ABCD is a quadrilateral with $m\angle A = 2x$, $m\angle B = 3x - 15$, $m\angle C = 4x - 90$, and $m\angle D = x + 15$. What can you conclude?

- I. $m\angle A = 90$
 II. ABCD is a rectangle
 III. ABCD is a parallelogram
- A. I only B. I and III only C. III only
 D. I, II, and III E. None of These

42. Determine the quadrilateral that the following coordinates create (the most specific)

E(-2,5), F(4,1), G(0,-5), and H(-6,-1)

- A. parallelogram B. rectangle
 C. rhombus D. square
 E. none of the above

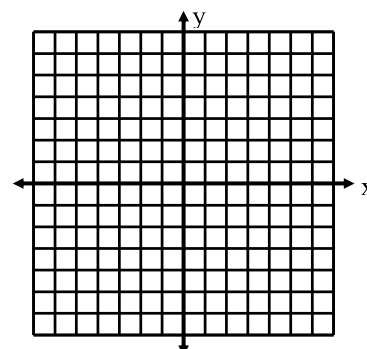


43. Find the area of the quadrilateral identified above.

44. Find FH .

45. Name the point at which the diagonals intersect.

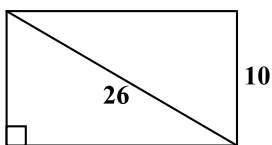
46. Find the area of triangle ABC with the coordinates A(2, 4), B(-4, 6), and C(-5, -3)



Chapter 10

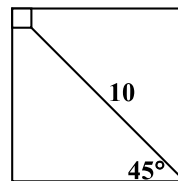
47. Find the area.

- A. 260
- B. 240
- C. 130
- D. 624



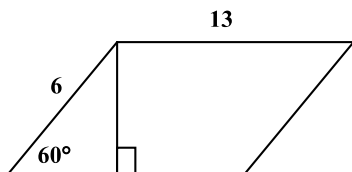
48. Find the area

- A. 50
- B. $25\sqrt{2}$
- C. 100
- D. 200



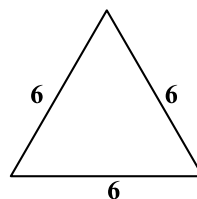
49. Find the area.

- A. $39\sqrt{3}$
- B. $18\sqrt{3}$
- C. 78
- D. 39



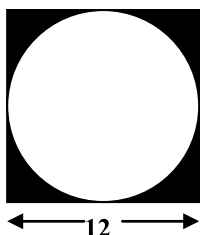
50. Find the area

- A. $36\sqrt{3}$
- B. $18\sqrt{3}$
- C. $12\sqrt{3}$
- D. $9\sqrt{3}$



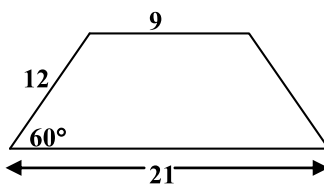
51. Find the area of the shaded region

- A. $144-36\pi$
- B. $144-18\pi$
- C. $144-12\pi$
- D. $144-6\pi$



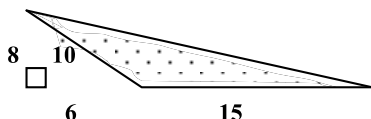
52. Find the area

- A. 360
- B. $90\sqrt{3}$
- C. $180\sqrt{3}$
- D. 90



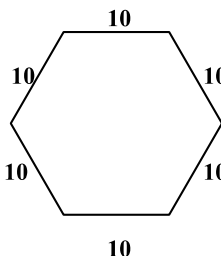
53. Find area of shaded triangle.

- A. 82
- B. 60
- C. 150
- D. 75

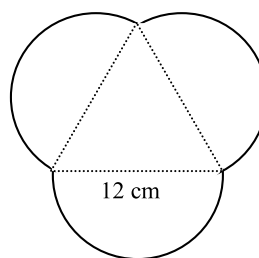


54. Find the area

- A. $300\sqrt{3}$
- B. $300\sqrt{2}$
- C. $150\sqrt{3}$
- D. $150\sqrt{2}$



55. Find the area of the following region created by three semicircles and an equilateral triangle.

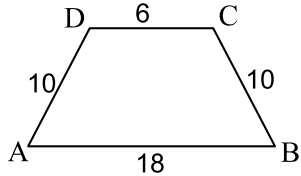


56. What is the area of an equilateral triangle with perimeter 24?

- A. $64\sqrt{3}$
- B. $32\sqrt{3}$
- C. $\frac{32\sqrt{3}}{3}$
- D. $16\sqrt{3}$

57. What is the area of a triangle with sides 15, 15, and 24?

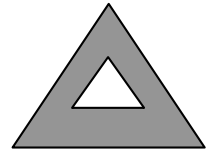
- A. 54
- B. 108
- C. 180
- D. 216

<p>58. A rhombus has diagonals 6 and 8. What is the area?</p> <p>A. 12 B. 24 C. 36 D. 48</p>
<p>59. A parallelogram and a triangle have equal areas. The base and height of the parallelogram are 12 and 9. If the base of the triangle is 36, find its height.</p> <p>A. 3 B. 6 C. 9 D. 12</p>
<p>60. What is the area of trapezoid ABCD?</p> <p>A. 96 B. 120 C. 144 D. 192</p> 
<p>61. Two base angles of an isosceles trapezoid have measure 45°. The bases have lengths 10 cm and 14 cm. Find the area of this figure.</p>
<p>62. A square is inscribed in a circle with radius 3. What is the area of the square?</p> <p>A. 9 B. 12 C. $3\sqrt{2}$ D. 18</p>
<p>63. The area of a circle is 25π. What is its circumference?</p> <p>A. 5π B. 10π C. 12.5π D. 50π</p>
<p>64. A triangle has an area of 28 square inches. The base of the triangle is 6 inches less than twice the height. What is the length of the base of the triangle?</p> <p>A. 5 inches B. 4 inches C. 7 inches D. 8 inches</p>
<p>65. A square is turned into a rectangle by decreasing one dimension by 6 and decreasing the other dimension by 5. The area of the new rectangle is 135 less than the area of the square. Find the side of the original square.</p> <p>A. 18 B. 10 C. 30 D. 15</p>
<p>66. One side of a rectangle is 14 and the perimeter is 44. What is the area?</p> <p>A. 112 B. 210 C. 224 D. 420</p>

67. Mitch wants to use 40 feet of fencing to enclose a flower garden. Which of these shapes would use all the fencing and enclose the largest area?
- A. A rectangle with a length of 8 feet and a width of 12 feet.
 - B. An isosceles right triangle with a side length of about 12 feet.
 - C. A circle with a radius of about 5.6 feet.
 - D. A square with a side length of 10 feet.

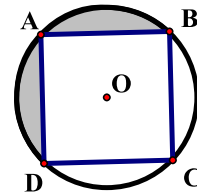
68. The dimensions of the small triangle are one-third those of the large triangle. A point is picked at random within the large triangle. What is the probability that the point selected is within the small triangle?

- A. $\frac{1}{9}$
- B. $\frac{1}{6}$
- C. $\frac{1}{3}$
- D. $\frac{2}{3}$



69. ABCD is a square inscribed in $\square O$ and $AB = 8$. Find the area of the shaded region.

- A. $16\pi - 32\sqrt{2}$
- B. $128\pi - 64$
- C. 112π
- D. $\frac{16\pi}{45} - 32\sqrt{2}$
- E. $16\pi - 32$

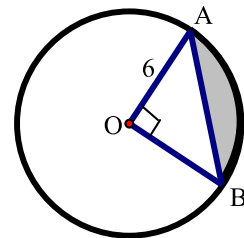


70. In the diagram, what is the length of AB ?

- A. $6\sqrt{2}$
- B. 6π
- C. 3π
- D. 36π

71. In the diagram, what is the area of the shaded region?

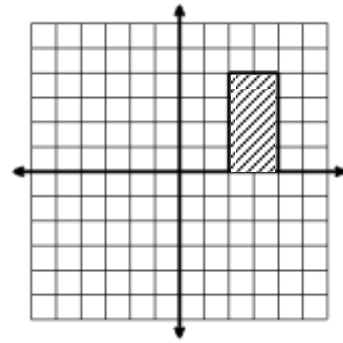
- A. $9\pi - 36$
- B. $12\pi - 36$
- C. $9\pi - 18$
- D. $12\pi - 18$



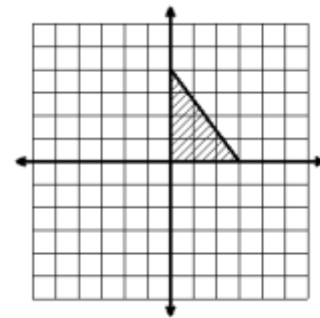
72. Find the length of a 45° arc in a circle of radius 10.

Chapter 11

73. A solid figure is formed by rotating the shaded region about the x – axis. What is the volume of the solid formed?

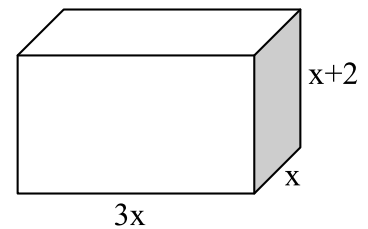


74. A solid figure is formed by rotating the shaded region about the y – axis. What is the surface area of the solid formed?

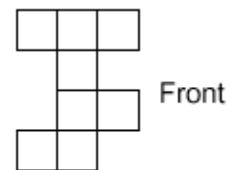


75. Given the surface area of the rectangular prism is 288, what is x ?

- A. 4
- B. 36
- C. 6
- D. 9



76. The drawing represents the view from directly above a solid figure that was built with cubes. Which drawing below shows a solid figure that would have this view from directly above?



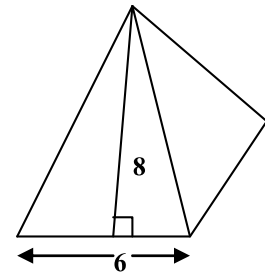
- A. Front
- B. Front
- C. Front
- D. Front

77. Find the total surface area of a cylinder with radius 4 and height 6.

- A. 16π
- B. 32π
- C. 48π
- D. 80π

78. The slant height of a regular square pyramid is 8 cm, and the length of each side of the base is 6 cm. Find the lateral area.

- A. 24 cm^2
- B. 48 cm^2
- C. 96 cm^2
- D. 192 cm^2



79. The surface area of a sphere is 324π square cm. Find the volume of the sphere.

- A. $432\pi \text{ cm}^3$
- B. $7776\pi \text{ cm}^3$
- C. $5051\pi \text{ cm}^3$
- D. $972\pi \text{ cm}^3$

80. What is the volume of a regular square pyramid with base edge 16 and height 6?

- A. 128
- B. 256
- C. 512
- D. 1536

81. What is the lateral area of the pyramid in the previous problem?

- A. 256
- B. 320
- C. 576
- D. 640

82. A sphere has area 16π . What is its volume?

- A. $\frac{8\pi}{3}$
- B. $\frac{32\pi}{3}$
- C. $\frac{64\pi}{3}$
- D. $\frac{256\pi}{3}$

83. What is the volume of a rectangular solid with dimensions 12, 9, and 6?

- A. 108
- B. 216
- C. 432
- D. 648

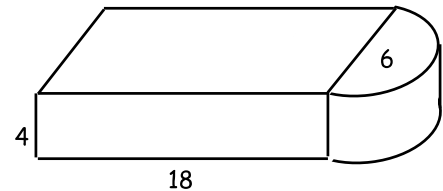
84. What is the total surface area of the solid in the previous problem?

- A. 234
- B. 468
- C. 252
- D. 360

85. A cone has radius 5 and height 12. A cylinder with radius 10 has the same volume as the cone. What is the cylinder's height?

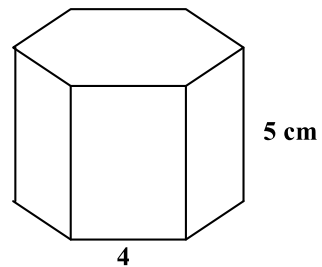
- A. 1
- B. 2
- C. 3
- D. 4

86. How many square inches, of the cake shown, will need to be covered with icing?



87. Find the volume of this regular hexagonal prism.

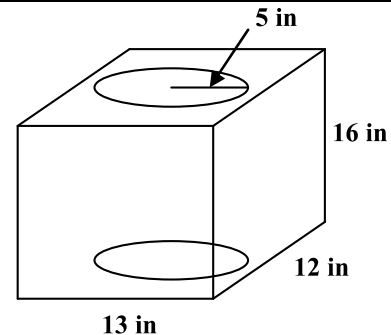
- A. $120\sqrt{2} \text{ cm}^3$
- B. $120\sqrt{3} \text{ cm}^3$
- C. $240\sqrt{2} \text{ cm}^3$
- D. $240\sqrt{3} \text{ cm}^3$



88. Find the total surface area of this regular hexagonal prism.

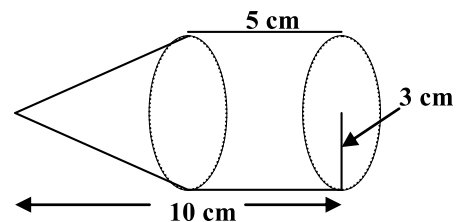
89. Find the volume of the space between the cylinder and the rectangular prism to the nearest cubic inch.

- A. 1728 in^3
- B. 1239 in^3
- C. 2688 in^3
- D. 1432 in^3



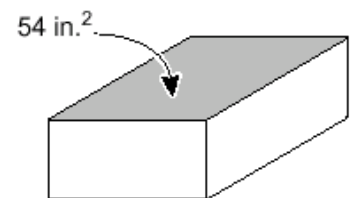
90. The total volume of the figure at right is:

- A. $45\pi \text{ cm}^3$
- B. $60\pi \text{ cm}^3$
- C. $30\pi \text{ cm}^3$
- D. $90\pi \text{ cm}^3$



91. The area of the top face of a rectangular prism is 54 square inches. If the volume is 162 cubic inches, which could be the dimensions of the rectangular prism.

- A. 2 in x 3 in x 18 in
- B. 2 in x 9 in x 9 in
- C. 3 in x 6 in x 9 in
- D. 6 in x 6 in x 9 in

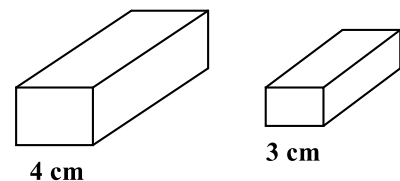


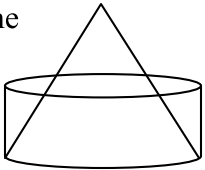
92. A cylinder with a height of 1.5 inches has a total surface area of 4π square inches. What is its approximate radius?

- A. 2.35 in.
- B. 4.0 in.
- C. 0.85 in.
- D. 2 in.

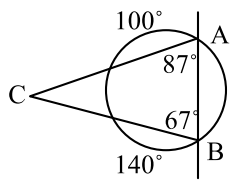
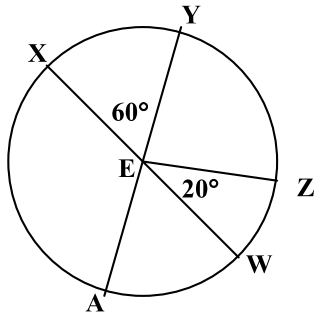
93. The volume of the larger prism is 128 cm^3 . If the prisms are similar, what is the volume of the smaller prism?

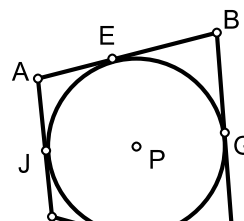
- A. 27 cm^3
- B. 54 cm^3
- C. 303.4 cm^3
- D. 96 cm^3



94.	The scale of two similar quadrilaterals is 1:2. The perimeter of the smaller quadrilateral is 80 centimeters. What is the perimeter of the larger quadrilateral? A. 40 cm. B. 80 cm. C. 160 cm. D. 320 cm.	
95.	The cone is twice the height of the cylinder. Find the ratio of the volume of the cone to the volume of the cylinder. A. 2:3 B. 3:2 C. 4:3 D. 2:1	
96.	Two similar pyramids have volumes 27 and 125. If the smaller has lateral area 18, what is the lateral area of the larger? A. 30 B. $83\frac{1}{3}$ C. 50 D. 25	
97.	Find the total surface area of a cylinder with radius 4 and height 6. A. 16π B. 32π C. 48π D. 80π	
98.	Two similar cones have heights 4 and 16. What is the ratio of their volumes? A. 1:64 B. 1:4 C. 1:16 D. 4:16	

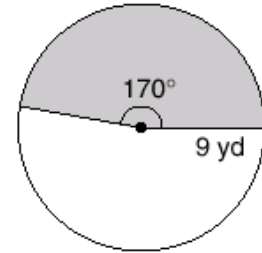
Chapter 10, 12

99.	Find the measure of AB . (The figure is not drawn to scale.) A. 34° B. 26° C. 86° D. 76°	
100.	What is the greatest possible distance between two points on a circle whose circumference is 62.8? A. 10 cm B. 20 cm. C. 31.4 cm D. 100 cm	
101.	Name an arc with a measure of 240° . A. \widehat{YZ} B. \widehat{AWX} C. \widehat{AWZ} D. \widehat{YWA}	Use circle E for these two problems
102.	If $XW = 6$, find the length of \widehat{WZ} . A. $\frac{\pi}{3}$ or 1.05 B. 2π or 6.28 C. 6π or 18.85 D. 4π or 12.57	



103. Given $EB = 6$; $BC = 13$, $CD = 9$, $AD = 6$.
Find the perimeter of ABCD.

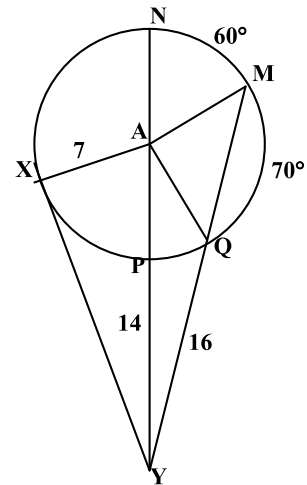
104. The designated fishing area of a circular pond at a park is marked with two ropes attached to a buoy at the center of the pond. Each rope is 9 yards long, and together they form an angle of 170° . What is the approximate area of the sector that is designated for fishing?



- A. 120 yd^2 B. 140 yd^2 C. 134 yd^2 D. 127 yd^2

For the next 4 questions, refer to circle A. \overline{XY} is tangent and \overline{NY} and \overline{YM} are secants. Round to the nearest tenth.

105. Find AY.
A. 21 B. 16
C. 70 D. 7
106. Find XY
A. 16 B. 16.2
C. 7 D. 19.8
107. Find $m\angle NYM$.
A. 10° B. 220°
C. 70° D. 5°
108. Find QM.
A. 70 B. 8.5
C. 7.2 D. 9.3

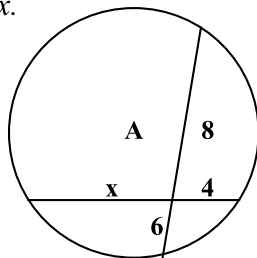


Use for these 4 problems

For the next 2 questions, find the value of x . Assume that A is the center of the circle.

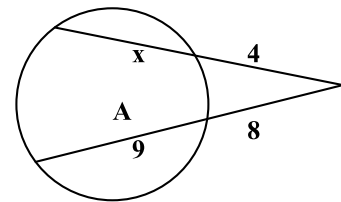
109. Find the value of x .

- A. 9
B. 1.25
C. 3.5
D. 12



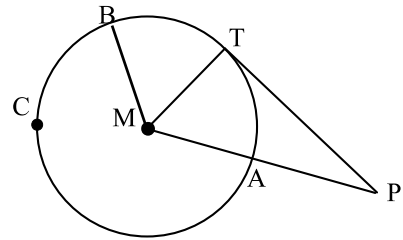
110. Find the value of x .

- A. 4
B. 17
C. 30
D. 8



111. If $\angle TPM = 54^\circ$, what is the measure of TBA ?

- A. 36° B. 54°
 C. 324° D. 306°



\overline{PT} is tangent to $\square M$ at T
 for both problems

112. If the measure of $TB = 2x$, $BCA = 6x + 100$ and $TA = 2x + 10$, find the measure of TA ?

- A. 25° B. 60°
 C. 50° D. 110°

113. Points A, B, and C lie on a circle. \overline{AB} is a diameter, and $\angle C = 110^\circ$. What is the measure of $\angle BAC$?

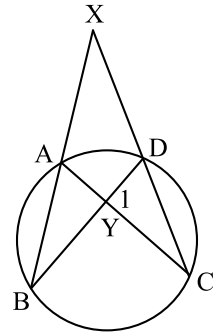
- A. 35° B. 55° C. 90° D. 110°

114. In the previous problem, point D is in such a position that ABCD is an inscribed quadrilateral. What is the sum of $\angle ABC$ and $\angle ADC$?

- A. 90° B. 110° C. 180° D. 145°

115. If $BC = 100^\circ$ and $AD = 30^\circ$, what does $\angle X$ equal?

- A. 25° B. 35°
 C. 60° D. 70°



116. If $BC = 100^\circ$ and $AD = 30^\circ$, what does $\angle 1$ equal?

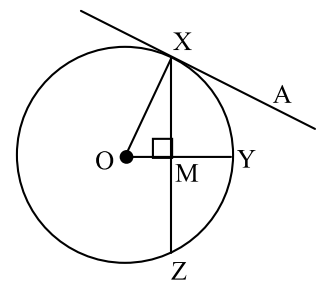
- A. 65° B. 85°
 C. 90° D. 115°

117. If $AY = j$, $YC = k$, and $YD = 7$, what does BY equal?

- A. $\frac{jk}{7}$ B. $\frac{7j}{k}$ C. $\frac{7k}{j}$ D. $\frac{k}{7j}$

118. Which of these equals $\angle AXZ$?

- A. $\angle XYZ$ B. $\angle OXM$
 C. $\frac{1}{2}\angle XOY$ D. $\angle XOY$



119. If the radius is 13 and $XZ = 24$, what is the distance from O to any chord that is equal to XZ ?

- A. 5 B. 8
 C. 11 D. $\sqrt{407}$

120. If $OM = 8$ and $MY = 9$, what does XZ equal?

- A. $6\sqrt{2}$ B. $2\sqrt{17}$ C. $\sqrt{145}$ D. 30

Geometry Pre AP Spring Semester Review

Solutions

- | | | |
|---------------------|--------------------------------|--|
| 1) C | 40) C | 80) C |
| 2) C | 41) A | 81) B |
| 3) C | 42) D | 82) B |
| 4) A | 43) 52 units ² | 83) D |
| 5) C | 44) $2\sqrt{26}$ | 84) B |
| 6) D | 45) $(-1, 0)$ | 85) A |
| 7) D | 46) 28 units ² | 86) $408 + 42\pi$ |
| 8) C | 47) B | 87) B |
| 9) A | 48) A | 88) $120 + 48\sqrt{3}$ cm ² |
| 10) B | 49) A | 89) B |
| $x = 12$ | 50) D | 90) B |
| 11) $y = 6\sqrt{2}$ | 51) A | 91) C |
| $k = 6\sqrt{3}$ | 52) B | 92) C |
| $m = 6$ | 53) B | 93) B |
| 12) C | 54) C | 94) C |
| 13) B | 55) $36\sqrt{3} + 54\pi$ | 95) A |
| 14) B | 56) D | 96) C |
| 15) C | 57) B | 97) D |
| 16) B | 58) B | 98) A |
| 17) B | 59) B | 99) C |
| 18) A | 60) A | 100) B |
| 19) D | 61) 24 cm ² | 101) B |
| 20) C | 62) D | 102) A |
| 21) C | 63) B | 103) 38 units |
| 22) 51 paces | 64) D | 104) A |
| 23) D | 65) D | 105) A |
| 24) C | 66) A | 106) D |
| 25) A | 67) D | 107) D |
| 26) A | 68) A | 108) B |
| 27) B | 69) E | 109) D |
| 28) A | 70) C | 110) C |
| 29) B | 71) C | 111) C |
| 30) B | 72) $\frac{5\pi}{2}$ | 112) B |
| 31) B | 73) 32π units ³ | 113) A |
| 32) B | 74) 24π units ² | 114) C |
| 33) D | 75) A | 115) B |
| 34) A | 76) B | 116) D |
| 35) A | 77) D | 117) A |
| 36) C | 78) C | 118) D |
| 37) B | 79) D | 119) A |
| 38) B | | 120) D |
| 39) B | | |