1. 38 cm
2. 30 cm^2
3. 60 cm^3
4. 65°
5. 15 cm
6. 384 cm^2
7. π/4 radians
8. 43.96 cm
9. Yes
10. 40 cm^2
11. 0.5
12. 8 cm
13. 22.62°
14. 7.07 cm
15. 0.5
16. 11.55 m
17. Use formula $ \frac{1}{2} ab \sin C$
18. ≈ 10.3 cm
19. ≈ 7.62 cm
20. 70°
21. 78.5 cm^2
22. 12.57 cm

23. 113.1 cm^2

24. 25.7 cm

25. 502.65 cm^3

26. 12 cm

27. Twice angle subtended by tangent points

28. 5 cm

29. 9.9 cm

30. $ (x-3)^2 + (y+2)^2 = 25 $

31. 90° each

32. 360°

33. 60 cm^2

34. Width = 6 cm, Length = 12 cm

35. 110°

36. (4, 6)

37. Equal by square properties

38. 40 cm^2

39. 34 cm

40. Diagonals bisect each other

41. 9 sides

42. 120°

43. 45°

44. 35

45. 360°

46. 9 sides

47. 108°

48. 9 sides

49. 9 sides

50. 9

51. (2, 2)

52. (-10, 16)

53. 10

54. 45°

55. $ \left(\frac{2}{\sqrt{13}}, \frac{3}{\sqrt{13}}\right) $

56. 2

57. Yes

58. (5, 6)

59. (3, 7)

60. Vector magnitude and direction found by components

61. $ \frac{1}{3} \pi \times 3^2 \times 7 = 21 \pi $ cm^3

62. Use derivative $ \frac{dA}{dt} = 2\pi r \frac{dr}{dt} $

63. 5

64. Perpendicular vector: (-y, x)

65. Length 8, angle 60°

66. Obtuse check via cosine rule

67. Use negative reciprocal slope

68. $ \frac{4}{3} \pi r^3 = \frac{4}{3} \pi 5^3 = 523.6 $ cm^3

69. Diagonal length = 13 cm

70. 7 cm

71. Use dot product formula, angle $\cos^{-1}$

72. Distance formula to line

73. Use area formula for coordinates

74. Perpendicular diagonals by dot product zero

75. External 18°, internal 162°

76. Complete square: center (2, -3), radius 5

77. Sine rule application

78. Sector area $ \frac{120}{360} \times \pi \times 10^2 = 104.7 $ cm^2

79. Line equation $ y = x + 2 $

80. Calculate midpoints and lengths

81. $ \frac{\sqrt{3}}{2} \times 10 = 8.66 $ cm

82. Bearing 45° or other measured angle

83. Sum interior angles $ = n - 2 \times 180 $

84. Side length $ = \frac{10\sqrt{2}}{\sqrt{2}} = 10 $ cm

85. (4, -4)

86. 40 cm

87. 360 cm^3

88. Reflection line $ y = -2 $

89. 60°

90. 5 cm

91. Diagonals equal by Pythagoras

92. 15 sides

93. 25°

94. 5

95. 60 cm^2

96. 5

97. 339.3 cm^3

98. 20°

99. 900°

100. (-8, 6)