

SM2H 6.4 Answers

1. 22π in; 69.11 in
2. 25π km²; 78.54 km²
3. 18π cm; 56.55 cm
4. $\frac{49}{4}\pi$ km; 38.48 km
5. $\frac{13}{2}\pi$ yd; 20.42 yd

6. $\frac{81}{8}\pi$ ft; 31.81 ft
7. $\frac{38}{3}\pi$ m; 39.79 m
8. $\frac{11}{2}\pi$ ft; 17.28 ft
9. $\frac{605}{8}\pi$ yd²; 237.58 yd²

10. $\frac{147}{8}\pi$ ft²; 57.73 ft²
11. 270π ft²; 848.23 ft²

12. $\frac{605}{8}\pi$ in²; 237.58 in²

13. $\frac{27}{2}\pi$ mi²; 42.41 mi²

14. $\frac{1183}{12}\pi$ ft²; 309.71 ft²

15. 10

16. 12

17. x=82, y=98, z=87

18. ang O=100,

Ang L=140 opposite angles
inscribed in quadrilateral are
supplementary

19. ang1=30, ang2=30, ang3=60,
ang4=30, ang5=60, ang6=60,
ang7=30, ang8=60

20. ang1=39; ang1+ang3=90

Ang2=90; KR is a diameter
Ang3=51; ang1+ang3=90

21. angS=135; angT=80

22. no; $10^2 + 8^2 \neq 11.6^2$

23. yes; $4.8^2 + 9^2 = 10.2^2$

24. 10

25. 10.5

26. 5

27. 6; 2 lines tangent from same point
are congruent

28. 6; 2 lines tangent from same point
are congruent

29. 81 units

30. 62 units

31. 133

32. 68

33. 55

34. 16

35. $5\sqrt{6}$

36. 3

37. 5.5