

Test 12

1. A: circumference
2. B: $360^\circ - 50^\circ = 310^\circ$
3. B: diameter
4. B: tangent
5. C: they are perpendicular
6. E: inscribed in
7. D: sector
8. A: secant
9. C: arc
10. D: The measure of an inscribed angle is half that of the intercepted arc.
 $48^\circ \div 2 = 24^\circ$
11. C
12. B
13. D
14. A
15. E

Test 13

1. B: radius
2. A: circumference
3. A: πr^2
4. B: $2\pi r$
5. E: $\frac{1}{2}$ long axis $\cdot \frac{1}{2}$ short axis $\cdot \pi$
6. B: $60'$
7. E: latitude
8. C: the prime meridian
9. C: $A = \pi r^2 \approx (3.14)(3^2) = 28.26 \text{ units}^2$
10. B: $C = 2\pi r \approx (2)(3.14)(3) = 18.84 \text{ units}$
(radius is half the diameter)
11. A: $\frac{22}{7}$

12. C: $A = \pi r^2 \approx \frac{22}{7} (7^2) = \frac{22}{\cancel{7}} \times \frac{\cancel{49}^7}{1} = 154 \text{ in}^2$
13. B: $C = 2\pi r \approx \frac{2}{1} \frac{22}{\cancel{7}} \frac{\cancel{7}^1}{1} = \frac{44}{1} = 44 \text{ in}$
14. B: $A = (5)(2)(\pi) \approx (10)(3.14) = 31.4 \text{ in}^2$
15. C: $A = \pi r^2 \approx (3.14)(4^2) = 50.24 \text{ units}^2$

Test 14

1. B: the area of the base
2. E: all of the above
3. E: edges
4. C: 8 vertices
5. D: cubic units
(often written as units^3)
6. A: $\pi r^2 \times h$
7. B: $V = (6)(6)(6) = 216 \text{ in}^3$
8. D: faces
9. C: $V = (3)(4)(9) = 108 \text{ units}^3$
10. E: $V = Bh = \pi r^2 h \approx (3.14)(10^2)(6) = 1,884 \text{ m}^3$
11. A: 6 faces
12. E: $V = (5)(8)(2) = 80 \text{ m}^3$
13. B: $V = (10)(10)(10) = 1,000 \text{ in}^3$
14. B: $V = Bh = \pi r^2 h \approx (3.14)(10^2)(16) = 5,024 \text{ ft}^3$
15. C: $V = Bh = \pi r^2 h \approx (3.14)(5^2)(10) = 785 \text{ ft}^3$