

Intermediate 1 End OF YEAR Review #2

ANSWER KEY

1. Vertical;  $x = 48$
2. Supplementary;  $x = 104$
3. Supplementary;  $x = 45$
4. Complementary;  $x = 11$
5. Right triangle;  $x = 41$
6. Isosceles triangle;  $x = 104$
7. Triangle  $A = \frac{b \cdot h}{2}$
8. Parallelogram  $A = b \cdot h$
9. Trapezoid  $A = \frac{(b_1 + b_2) \cdot h}{2}$
10. Circle  $A = \pi \cdot r^2$
11. Rectangle  $A = l \cdot w$
12. Circumference  $C = 2 \cdot \pi \cdot r$  or  $C = \pi \cdot d$
13.  $A = 1963.5 \text{ mm}^2$
14.  $C = 31.4 \text{ in}$
15.  $C = 37.7 \text{ m}$
16.  $C = 20 \text{ yd}$
17.  $C = 50.3 \text{ ft}$  BOTH students are incorrect
18.  $A = 70,685.8 \text{ ft}^2$
19. You would need about 16 small cookies to equal the area of the giant cookie
20. Circumference is the outside of the circle
21. The length and width of the square box would each need to be more than 18 inches.
22. 385 miles in 7 hours
23. 48 pages in 24 minutes
24. 42 minutes to run 6 miles
25. Conoco \$3.04/gallon Shell \$3.25/gallon  
Conoco is a better deal.
26. 0.25 degrees per minute
27. \$6 per hour
28. 80 tickets per hour
29. a. A diagonal slice would give us an oval.  
b. A horizontal slice would give us a circle.  
c. A vertical slice would give us a triangle.
30.  $SA = 81.8 \text{ cm}^2$
31.  $V = 44.9 \text{ cm}^3$
32.  $SA = 192 \text{ cm}^2$
33.  $V = 144 \text{ cm}^3$
34.  $w = 3.9 \text{ in}$
35.  $SA = 120.1 \text{ in}^2$
36. Width = 6 cm; Volume =  $135 \text{ cm}^3$
37.  $SA = 258 \text{ cm}^2$
38. Area of shaded region =  $78.7 \text{ cm}^2$
39. Area of shaded region =  $610 \text{ m}^2$