

Warm Up 96

1. tessellation
2. 23.65
3. C

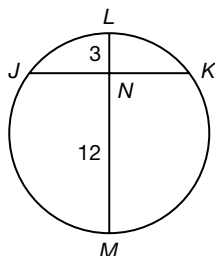
Lesson Practice 96

- a. 5:2
- b. 8:15
- c. area ratio: 4:1,
circumference ratio: 2:1
- d. 81:100

Practice 96

1. 23.12

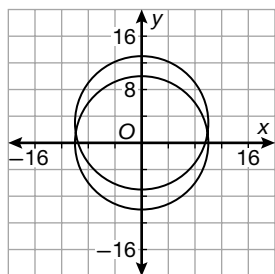
2. a.



b. 6

3. -3

4. $x^2 + (y - 3)^2 = 100$;



5. $4\sqrt{2}$ centimeters

6. Sample: No, because when the net is folded up, the two 'hanging' squares overlap.

7. 3 in.

8. $18 + 9\pi$ ft²; 46.3 ft²

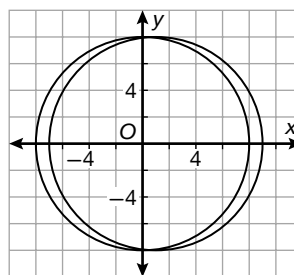
9. 270°

10. No, the Law of Sines cannot be used because it requires that at least one angle and its opposite side are both known. In the triangle given, two sides and an included angle are known, so the Law of Cosines could be applied.

11. πX^2

12. $k = 6$

13. $(x - 1)^2 + y^2 = 64$;

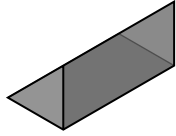


14. He translated twice instead of reflecting and translating.

15. D

16. 26.7 ft

17. triangular prism



18. The slanted cross section will have the larger area than the circular parallel cross section, because the cross section stretches in the direction it slants, while the width remains the same, forming an oval.

19. $m\angle DFE = 70^\circ$

20. 90 square feet. There are 9 ft^2 in 1 yd^2 , therefore, multiply 10 by 9

21. $x = \frac{16z\sqrt{3}}{9}$

22. 2521.5 ft^2

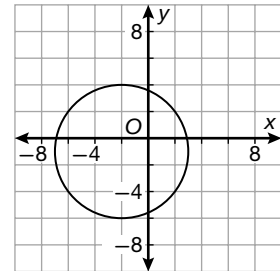
23. hexagonal prism;
12 vertices, 18 edges,
2 bases

24. 1810 in^2

25. 72 ft

26. See student work; The area of $\triangle ABC = 10$ and the area of $\triangle A'B'C'$ is also 10.

27. $(x + 2)^2 + (y + 1)^2 = 25$;



28. 36

29.
$$\frac{\tan \theta}{\sin \theta} = \frac{\left(\frac{a}{b}\right)}{\left(\frac{a}{c}\right)} = \frac{\left(\frac{1}{b}\right)}{\left(\frac{1}{c}\right)} = \frac{c}{b}$$

$$= \frac{1}{\left(\frac{b}{c}\right)} = \frac{1}{\cos \theta}$$

30. 1:10