

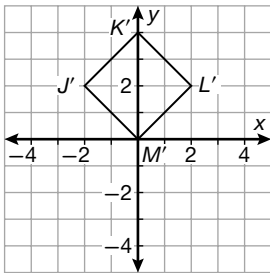
Warm Up 112

1. sector
2. $h = 2\sqrt{2}$ in. ≈ 2.8 in.,
 $A = 4\sqrt{2}$ in² ≈ 5.7 in²
3. $\frac{3\pi}{4}$ cm² or about
2.36 cm²

Lesson Practice 112

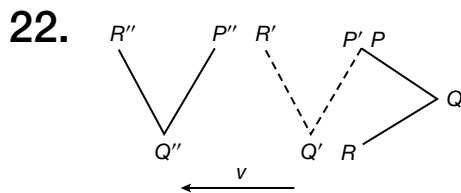
- a. 658 mm²
- b. 199 in²
- c. 9276 m²

Practice 112

1. 35 cm^2
2. 16 cm
3. $\sqrt{410}$
4. No. An equilateral triangle with side lengths of 10 cm has a larger area since it is regular.
5. A
6. $(-4, 5), (-4, -2), (2, 7)$
7. a. $\begin{bmatrix} 2 & 4 & 2 & 0 \\ 2 & 0 & 2 & 0 \end{bmatrix}$
 b. $\begin{bmatrix} -2 & 0 & 2 & 0 \\ 2 & 4 & 2 & 0 \end{bmatrix}$
 c. 
8. 5
9. 1 foot: 1.1×10^5 miles

10. a. Yes, because if a line in the plane of a circle is perpendicular to a radius at its endpoint on the circle, then the line is tangent to the circle, and $\angle APQ$ is a right angle.
 b. \overleftrightarrow{BQ}
11. 41.8 in^2
12. Parallel Postulate
13. No. The radii of the circles may be different, which will affect the length of the arcs for a given length of a chord.
14. C
15. sample: pentagon inscribed in a circle; circle circumscribed about a pentagon
16. $(-2, -3)$
17. 0.5 in^2
18. $(11, -11, 10)$

19. He would fill it less than one quarter of the height because the frustum with one half of the height of the cone has $\frac{7}{8}$ of the cone's total volume.
20. $AC = 4.6$ cm;
 $LM = 9.3$ cm;
 $MN = 3.2$ cm
21. If the value $t = 0$ is chosen, the point is $(0, 0, 0)$.



23. 37.68 in^2
24. C
25. 7.4 ft^2
26. $D_{0,1}(x, y) \rightarrow (x, y)$
27. $(x + 7) + (x - 11)$
 $= 2x - 4$; Since
 $2x - 4 < 2x + 1$, these
 three side lengths
 cannot form a triangle.