Warm Up 94

1. tangent
2. false
3. 17,867 feet

Lesson Practice 94

a. 59.57

b. $\angle D \approx 112°$, $\angle E \approx 48°$

c. 88 feet

Practice 94

1. $h : 2p$

2. Humberto only found the magnitude of the velocity, but did not specify the direction of 53.13°.

3. 45°

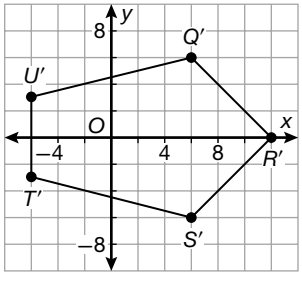
4. 127.3 ft

5. slopes of $\overline{AB}$, $\overline{BC}$, $\overline{CD}$, and $\overline{AD}$ are $\frac{1}{5}$, 5, $\frac{1}{5}$, and 5; $\overline{AB} \parallel \overline{CD}$ and $\overline{BC} \parallel \overline{AD}$, so $ABCD$ is a parallelogram.

6. $\frac{s^3\sqrt{3}}{6}$

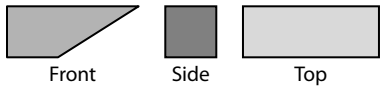
7. 299 m

8. $-0.6 < x < 7$

9. 

10. $PR \approx 5$

11. $\tan^2\theta = \frac{\sin^2\theta}{1 - \sin^2\theta}$

12. 

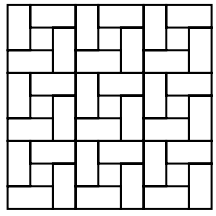
13. A

14. 15

15. 301.6 cm^2

16. $P = 225$ in.;
$A = 3487.5$ in^2

17. $\frac{a}{\sqrt{1 - \cos^2 A}} = \frac{b}{\sqrt{1 - \cos^2 B}}$
$= \frac{c}{\sqrt{1 - \cos^2 C}}$

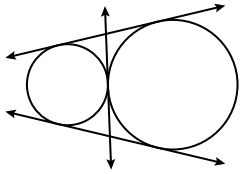
18. 

19. $(x - 1)^2 + (y + 1)^2 = 1$

20. Yes, Nadim can get two potentially correct answers. Because a measure for a second angle in the triangle is not known, the angle between sides *a* and *b* can be θ_1 or $180° - \theta_1$.

21. Using the formulas for the surface area and volume of a sphere, if $V = S$, then $\frac{4}{3}\pi r^3 = 4\pi r^2$. Simplifying $r = 3$.

22. 3 common tangents



23. 13

24. Sample: divide circle in half, then divide one half into thirds

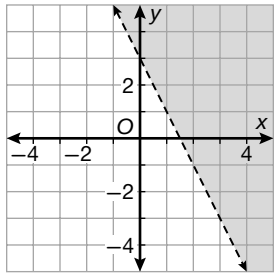
25. LA Congruence Theorem

26. B

27. about 14 basalt rocks

28. $(13 - c)(5) = 7(c - 1)$; $c = 6$

29.



30.