

Warm Up 80

1. solid
2. $S = 294 \text{ ft}^2$, $V = 343 \text{ ft}^3$
3. $S \approx 477.52 \text{ in}^2$,
 $V \approx 753.98 \text{ in}^3$

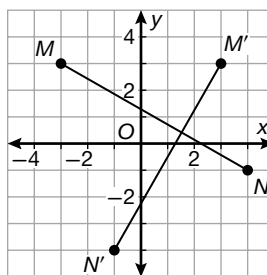
Lesson Practice 80

- a. 200.96 m^2
- b. 5575.28 in^3
- c. $S \approx 2412.74 \text{ ft}^2$;
 $V \approx 8578.64 \text{ ft}^3$
- d. 134.63 cm^3

Practice 80

1. 2.3
2. approximately 7854.0 in²
3. $x = 147^\circ$; $\widehat{CD} = 250^\circ$
4. parallel: $3y = x - 3$
and $y = \frac{1}{3}x - 6$;
perpendicular:
 $y = 3x + 4$ and
 $9y = -3x + 7$
5. 58°
6. Between two objects,
the angle of depression
looking downward is
the same as the angle
of elevation looking
upward.
7. Yes; It has two pairs
of congruent opposite
sides.
8. $S \approx 1246.43 \text{ yd}^2$;
 $V \approx 3185.3 \text{ yd}^3$
9. 9.23 minutes

10.



$$M'(3, 3), N'(-1, -4)$$

11. 59 square inches
12. $101^\circ, 86^\circ, 79^\circ, 94^\circ$
13. *If $3x + 2 \neq 11$, then $x - 6 \neq -3$; The inverse is true.*
14. 11.7
15. 19°
16. No. It is possible to draw several circles through two points. Yes. Three non-collinear points define a triangle with a unique circumcenter, which is the center of the unique circle to pass through the points.
17. approximately 0.46 cubic feet

18. Sample: It would have to be known that the four triangles shown are congruent to one another.

19. $x_1 = 2$, $x_2 = 2$, and $y_2 = 7$

20. 4.3 inches

21. 45°

22. $QS = 12$

23. 113.4 in^2

24. C

25. 5.1 in^3

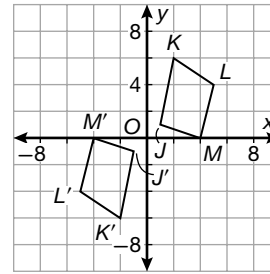
26. $m\angle L = 65^\circ$,
 $m\angle M = 125^\circ$,
 $m\angle N = 50^\circ$,
 $m\angle O = 120^\circ$

27. approximately
 $180,000 \text{ cm}^3$

28. 4

29. For all odd values of n , $y = x^n$ has 180° rotational symmetry.

30.



$J'(-1, -1)$, $K'(-2, -6)$,
 $L'(-5, -4)$, $M'(-4, 0)$