

Answer Key

Lesson 12.7

Practice Level C

- 1.** yes; 1 : 2 **2.** yes; 1 : 4 **3.** not similar
4. yes; 5 : 3 **5.** 256 in.²; 224 in.³
6. 2432π in.², $15,360\pi$ in.³ **7.** 324 cm³; 1 : 3
8. 243 ft²; 182.25 ft³ **9.** $S = 90$ cm², $V = 50$ cm³;
 $S = 810$ cm², $V = 1350$ cm³ **10.** $S \approx 141.4$ in.², $V \approx 109.5$ in.³; $S \approx 2262.4$ in.², $V \approx 7008$ in.³
11. $S \approx 201.1$ ft², $V \approx 268.1$ ft³; $S \approx 2463.0$ ft², $V \approx 11,494.0$ ft³ **12.** 6 : 5 **13.** 3 : 22 **14.** 450
15. 686 **16.** 7 **17.** 3, 5 **18.** 728π m²
19. 1920 yd³ **20.** smaller cylinder: $r = 4$ cm,
 $h = 8$ cm; larger cylinder: $r = 5$ cm, $h = 10$ cm;
21. 5.8 ft high, 5.5 ft wide, 12.8 ft long
22. 1.56 ft³