Measurement Quiz

1. 12ft by 8ft
2. 42 squares
3. 20
4. 8
5. 9.14 (approximately)
6. 3,960
7. Answers may vary.
8. 55.7 cm (approximately)
9. She is incorrect. The circumference is $12\pi$ cm.
10. (a) 8.5 cm$^2$ (b) 6.5 cm$^2$
11. (a) $54 \sqrt{3}$ cm ($\approx 93.5$ cm) (b) $36\pi$ cm$^2$ ($\approx 113.1$ cm$^2$)
12. 94 m
13. $255$
14. (a) 7.85 in.
15. m
16. 0.4 in.
17. ft$^2$
18. km$^2$
19. 1,080 mi$^2$
20. 1,230 ft$^2$
21. 901.8 in$^2$
22. 3,456 cm$^2$
23. (c) 171.9 yd$^2$
24. (c) 210
25. (a) 5,572.5 in$^3$
26. (c) 1,652°F
27. (b) 2,500 m
28. (b) $\sqrt{185}$
29. (a) $(x + 6)^2 + y^2 = 16$
30.

31. (a) 178.5 m$^2$ (b) 37.7 cm$^2$ (c) 12.6 cm$^2$
   (d) 26.1 cm$^2$ (e) 64.5 cm$^2$ (f) 24 cm$^2$
32. 127.3 ft
33. 3 units
34. (a) Yes (b) No
35.  5,400 cm²

36.  (a) SA ≈ 179.4 cm²; V = 128 cm³    (b) SA ≈ 301.6 cm²; V ≈ 301.6 cm³
    (c) SA ≈ 314.2 m²; V = 523.6 m³    (d) SA ≈ 169.6 cm²; V = 169.6 cm³
    (e) SA = 304 m²; V = 320 m³

37.  It shows 8 times the volume, and is therefore deceptive. They should double the height only, and keep the radius the same.

38.  252 cm²

39.  (a) 12.5 m²    (b) 6 ft²

40.  13.9 in. (approximately)

41.  Answers may vary.

42.  (a) t    (b) 1 cm³    (c) 1 g; 1 mL    (d) 25    (e) 1.65
    (f) 10,000    (g) 3.5    (h) 53    (i) 51,800    (j) 10,000,000
    (k) 50,000    (l) 0.257    (m) 52.813    (n) 4.8    (o) 5,000,000

43.  6,000 kg; 6 t

44.  (a) L    (b) kg    (c) g    (d) g    (e) kg
    (f) t    (g) mL

45.  (a) unlikely    (b) likely    (c) unlikely    (d) likely
    (e) unlikely

Do your best! Live and learn!