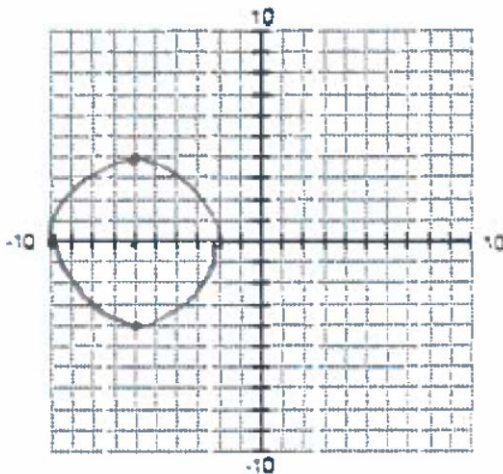


## Measurement Quiz

## Solutions

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)  $8.5 \text{ cm}^2$                       (b)  $6.5 \text{ cm}^2$
11. (a)  $54\sqrt{3} \text{ cm}$  ( $\approx 93.5 \text{ cm}$ )                      (b)  $36\pi \text{ cm}^2$  ( $\approx 113.1 \text{ cm}^2$ )
12. 94 m
13. \$255
14. (a) 7.85 in.
15. m
16. 0.4 in.
17.  $\text{ft}^2$
18.  $\text{km}^2$
19. 1,080  $\text{mi}^2$
20. 1,230  $\text{ft}^2$
21. 901.8  $\text{in}^2$
22. 3,456  $\text{cm}^2$
23. (c) **171.9  $\text{yd}^2$**
24. (c) 210
25. (a) 5,572.5  $\text{in}^3$
26. (c) 1,652 $^\circ\text{F}$
27. (b) 2,500 m
28. (b)  $\sqrt{185}$
29. (a)  $(x + 6)^2 + y^2 = 16$

30.



31. (a)  $178.5 \text{ m}^2$                       (b)  $37.7 \text{ cm}^2$                       (c)  $12.6 \text{ cm}^2$   
(d)  $26.1 \text{ cm}^2$                       (e)  $64.5 \text{ cm}^2$                       (f)  $24 \text{ cm}^2$
32. 127.3 ft
33. 3 units
34. (a) Yes                      (b) No

35.  $5,400 \text{ cm}^2$
36. (a)  $SA \approx 179.4 \text{ cm}^2$ ;  $V = 128 \text{ cm}^3$       (b)  $SA \approx 301.6 \text{ cm}^2$ ;  $V \approx 301.6 \text{ cm}^3$   
 (c)  $SA \approx 314.2 \text{ m}^2$ ;  $V = 523.6 \text{ m}^3$       (d)  $SA \approx 169.6 \text{ cm}^2$ ;  $V = 169.6 \text{ cm}^3$   
 (e)  $SA = 304 \text{ m}^2$ ;  $V = 320 \text{ m}^3$
37. It shows 8 times the volume, and is therefore deceptive. They should double the height only, and keep the radius the same.
38.  $252 \text{ cm}^2$
39. (a)  $12.5 \text{ m}^2$       (b)  $6 \text{ ft}^2$
40. 13.9 in. (approximately)
41. Answers may vary.
42. (a) t      (b)  $1 \text{ cm}^3$       (c) 1g; 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!**