## Answers for Lesson 2-6, pp. 83-84 Exercises

1. $\ell$ is the length; $w$ is the width.
2. Solve the formula $d=r t$ for $r$ by dividing both sides of the equation by $t$.
3. $\frac{7}{8} \mathrm{~cm}^{2}$ 4. 35 in. ${ }^{2}$
4. Area of a trapezoid; $h$ is the height; $b_{1}$ and $b_{2}$ are the bases.
5. Distance formula; $d$ is the distance, $r$ is the rate, and $t$ is the time.
6. Perimeter of a square; $s$ is the side length.
7. $29.93 \mathrm{~m}^{2}$
8. $0.25 \mathrm{~cm}^{2}$
9. $t=\frac{d}{r}$
10. $h=\frac{3 v}{B}$
11. $24 \mathrm{mi} / \mathrm{h}$
12. $24 \mathrm{~m}^{2}$
13. $81 \mathrm{~cm}^{2}$
14. $12 \frac{1}{2}$ in. $^{2}$
15. about $108 \mathrm{mi} / \mathrm{h}$
16. $h=\frac{v}{\ell w}$
17. $r=\frac{C}{2 \pi}$
18. $C=K-273$
19. $g=W+25$
20. 45 seconds
21. $2 \frac{2}{3} h$
22. $\frac{9}{\pi} \mathrm{ft}$
23. You use properties of equality; instead of getting a number for an answer, you get an equation.
24. a. 2,220 ft
b. The difference between the dew point and air temperature will grow larger, and the height of the base of the cloud will increase. Examples: $H=222(80-70)=$ 2,220 ft $H=222(80-60)=$ 4,440 ft
25. 3.2 cm
26. C
27. G
28. B
29. 16
30. 17
31. 6
