Name _____

Solving for a Variable

Date

Solve for the indicated Variable.

5. $V = LWH \quad for\ H$

6. $I = Prt \quad for\ r$

7. $V = \pi r^2 h \quad for\ h$

9. $V = \frac{1}{3}Bh \quad for\ B$

8. $S = 2\pi rh \quad for\ r$

21. $A = \frac{1}{2}h(B + b) \quad for\ b$

10. $V = \frac{1}{3}\pi r^2 h \quad for\ h$

15. $P = 2L + 2W \quad for\ W$

11. $I = \frac{E}{R} \quad for\ R$

17. $D = \frac{C-S}{n} \quad for\ S$

20. $A = P(1 + rt) \quad for\ t$

19. $R = C(1 + r) \quad for\ r$

25. A rectangular solid has a base with length 6 cm and width 4 cm. If the volume of the solid is 72 cubic centimeters (cm^3), find the height of the solid. See exercise 5.

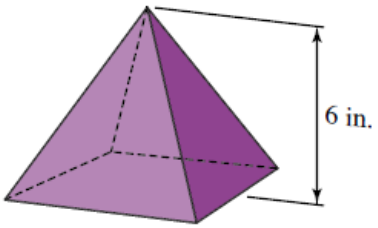
26. A cylinder has a radius of 4 inches (in.). If its volume is 144π cubic inches ($in.^3$), what is the height of the cylinder? See exercise 7.

27. A principal of \$2000 was invested in a savings account for 4 years. If the interest earned for that period was \$480, what was the interest rate? See exercise 6.

28. The retail selling price of an item, R, was \$20.70. If its cost, C, to the store was \$18, what was the markup rate, r? See exercise 19.

29. The radius of the base of a cone is 3 cm. If the volume of the cone is 24π cm^3, find the height of the cone. See exercise 10.

30. The volume of a pyramid is 30 $in.^3$. If the height of the pyramid is 6 in., find the area of its base, B. See exercise 9.



31. If the perimeter of a rectangle is 60 ft and its length is 18ft, find its width. See exercise 15.

32. The yearly depreciation, D, for a piece of machinery was \$1500 over 8 years. If the cost of the machinery was \$15,000, what was its salvage value, S? See exercise 17.

33. A principal of \$5000 was invested in a time-deposit account paying 9% annual interest. If the amount in the account at the end of a certain period was \$7250, for how long was the money invested? See exercise 20.

34. The area of a trapezoid is 36 $in.^2$. If its height is 4 in. and the length of one of the bases is 11 in., find the length of the other base. See exercise 21.