

## Practice Problems

1. Solve  $d = rt$  for  $r$
2. Solve  $P = \frac{144p}{y}$  for  $p$
3. Solve  $R = \frac{cS}{d}$  for  $C$
4. Solve  $P = a + b + c$  for  $b$
5. Solve  $T = m - n$  for  $n$
6. Solve  $A = \frac{a+b}{2}$  for  $b$
7. Solve  $V = lwh$  for  $w$
8. Solve  $m = \frac{y_2 - y_1}{x_2 - x_1}$  for  $y_2$
9. Solve  $ax + by = c$  for  $y$
10. Solve  $A = \frac{a+b+c+d}{4}$  for  $c$
11. Solve  $S = 2(lw + lh + wh)$  for  $w$
12. Solve  $P = 2(l + w)$  for  $l$
13. Solve  $d = \frac{c}{\pi}$  for  $\pi$
14. Solve  $\frac{1}{f} = \frac{1}{a} + \frac{1}{b}$  for  $f$
15. Solve  $A = p(1 + rt)$  for  $t$
16. Solve  $I = prt$  for  $r$
17. Solve  $ax + b = c$  for  $a$
18. Solve  $S = 2\pi rh$  for  $h$
19. Solve  $A = 2\pi r^2 + 2\pi rh$  for  $h$
20. Solve  $y - y_1 = m(x - x_1)$  for  $x$
21. Solve  $R = \frac{l+3w}{2}$  for  $w$
22. Solve  $ax + by + c = 0$  for  $y$
23. Solve  $C = \frac{5}{9}(F - 32)$  for  $F$
24. Solve  $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$  for  $R$
25. Solve  $H = \frac{62.4NS}{33,000}$  for  $N$
26. Solve  $B = \frac{703w}{h^2}$  for  $w$
27. Solve  $K = \frac{1}{2}mv^2$  for  $m$
28. Solve  $5t - 2r = 25$  for  $t$
29. Solve  $S = R - rR$  for  $R$
30. Solve  $V = \frac{1}{3}\pi h^2(3r - h)$  for  $r$
31. Solve  $A = \frac{1}{2}nal$  for  $n$
32. Solve  $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$  for  $T_1$
33. Solve  $F = \frac{gm_1m_2}{d^2}$  for  $g$
34. Solve  $\frac{12ds}{w} = CD$  for  $w$
35. Solve  $A = \frac{1}{2}bh$  for  $b$
36. Solve  $s = r\theta$  for  $\theta$
37. Solve  $h = vt - 16t^2$  for  $v$
38. Solve  $C = \frac{100B}{L}$  for  $L$
39. Solve  $A = S(1 - DN)$  for  $N$
40. Solve  $D = \frac{11}{5}(P - 15)$  for  $P$
41. Solve  $E = IR$  for  $I$
42. Solve  $E = mc^2$  for  $c^2$
43. Solve  $F = \frac{lt}{d}$  for  $l$
44. Solve  $A = 2\pi r^2 + 2\pi rh$  for  $\pi$

## Practice Problems Key

$$1. r = \frac{d}{t}$$

$$2. p = \frac{Py}{144}$$

$$3. C = \frac{Rd}{s}$$

$$4. b = P - a - c$$

$$5. n = m - T$$

$$6. b = 2A - a$$

$$7. w = \frac{v}{lh}$$

$$8. y_2 = mx_2 - mx_1 + y_1$$

$$9. y = \frac{c-ax}{b}$$

$$10. c = 4A - a - b - d$$

$$11. w = \frac{s-2lh}{2l+2h}$$

$$12. l = \frac{P-2w}{2}$$

$$13. \pi = \frac{c}{d}$$

$$14. f = \frac{ab}{b+a}$$

$$15. t = \frac{A-p}{pr}$$

$$16. r = \frac{l}{pt}$$

$$17. a = \frac{c-b}{x}$$

$$18. h = \frac{s}{2\pi r}$$

$$19. h = \frac{A-2\pi r^2}{2\pi r}$$

$$20. x = \frac{y-y_1+mx_1}{m}$$

$$21. w = \frac{2R-l}{3}$$

$$22. y = \frac{-ax-c}{b}$$

$$23. F = \frac{9}{5}C + 32$$

$$24. R = \frac{R_1R_2}{R_2+R_1}$$

$$25. N = \frac{33,000H}{62.4S}$$

$$26. w = \frac{Bh^2}{703}$$

$$27. m = \frac{2k}{v^2}$$

$$28. t = \frac{2}{5}r + 5$$

$$29. R = \frac{S}{1-r}$$

$$30. r = \frac{3V+\pi h^3}{3\pi h^2}$$

$$31. n = \frac{2A}{al}$$

$$32. T_1 = \frac{T_2P_1V_1}{P_2V_2}$$

$$33. g = \frac{Fd^2}{m_1m_2}$$

$$34. w = \frac{12ds}{CD}$$

$$35. b = \frac{2A}{h}$$

$$36. \theta = \frac{s}{r}$$

$$37. v = \frac{h+16t^2}{t}$$

$$38. L = \frac{100B}{C}$$

$$39. N = \frac{S-A}{SD}$$

$$40. P = \frac{5}{11}D + 15$$

$$41. I = \frac{E}{R}$$

$$42. c^2 = \frac{E}{m}$$

$$43. l = \frac{Fd}{t}$$

$$44. \pi = \frac{A}{2r^2+2rh}$$