

2.5 Linear Equations and Formulas

A formula is given along with the values of all but one of the variables in the formula. Find the value of the variable not given.

1) $P = 2L + 2W$; $L = 2$, $W = 5$ 1) _____
 A) 20 B) 7 C) 14 D) 9

2) $V = \frac{4}{3}\pi r^3$; $r = 3$, $\pi = 3.14$ 2) _____
 A) 339.12 B) 37.68 C) 36 D) 113.04

Solve the formula for the specified variable.

3) $A = \frac{1}{2}bh$ for h 3) _____
 A) $h = \frac{2A}{b}$ B) $h = \frac{A}{2b}$ C) $h = \frac{b}{2A}$ D) $h = \frac{Ab}{2}$

4) $V = \frac{1}{3}Bh$ for h 4) _____
 A) $h = \frac{B}{3V}$ B) $h = \frac{V}{3B}$ C) $h = \frac{3V}{B}$ D) $h = \frac{3B}{V}$

5) $F = \frac{9}{5}C + 32$ for C 5) _____
 A) $C = \frac{F - 32}{9}$ B) $C = \frac{5}{F - 32}$ C) $C = \frac{9}{5}(F - 32)$ D) $C = \frac{5}{9}(F - 32)$

6) $I = \frac{nE}{nr + R}$ for n 6) _____
 A) $n = \frac{IR}{Ir + E}$ B) $n = \frac{-R}{Ir - E}$ C) $n = IR(Ir - E)$ D) $n = \frac{-IR}{Ir - E}$

7) $P = a + b + c$ for a 7) _____
 A) $a = P + b + c$ B) $a = b + P - c$ C) $a = P - b - c$ D) $a = b + c - P$

8) $A = \frac{1}{2}h(b_1 + b_2)$ for b_1 8) _____
 A) $b_1 = \frac{A - h(b_2)}{2h}$ B) $b_1 = \frac{(b_2)2A - h}{h}$
 C) $b_1 = \frac{h(b_2) - 2A}{h}$ D) $b_1 = \frac{2A - (h)(b_2)}{h}$

9) $A = P(1 + nr)$ for n 9) _____
 A) $n = \frac{Pr}{A - P}$ B) $n = \frac{P - A}{Pr}$ C) $n = \frac{A - P}{Pr}$ D) $n = \frac{A}{r}$

Answer Key

Testname: PRACTICE04A

- 1) C
- 2) D
- 3) A
- 4) C
- 5) D
- 6) D
- 7) C
- 8) D
- 9) C