Solving Formulas for Given Variables

Use the following formulas for numbers 1-8. Each formula is used once.

$$I = Prt$$

$$A = \frac{1}{2}(b_1 + b_2)h$$

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

$$P = 2l + 2w$$

$$A = \frac{1}{2}bh$$

$$A = \pi r^2$$

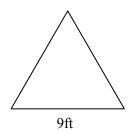
$$C = 2\pi r$$

$$d = rt$$

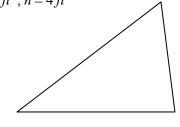
- 1) The formula for the perimeter of a rectangle is \cdot Solve for w.
- 2) The distance formula is ______. Solve for *r*.
- 3) The temperature formula is ______. Solve for *C*.
- 4) The formula for the area of a triangle is ______. Solve for *b*.
- 5) The formula for simple interest is _____. Solve for r.
- 6) The formula for the area of a circle is $\frac{1}{r}$. Solve for r.
- 7) The formula for the circumference of a circle is ______. Solve for *r*.
- 8) The formula for the area of a trapezoid is ______. Solve for *h*.

Find the missing part of each triangle.

9)
$$A = 27cm^2$$



10)
$$A = 18 \text{ ft}^2$$
, $h = 4 \text{ ft}$



$$h = \underline{\hspace{1cm}}$$

$$b =$$

Answer Key

- 1) P = 2l + 2w; $w = \frac{P 2l}{2}$
- 2) d = rt; $r = \frac{d}{t}$
- 3) $F = \frac{9}{5}C + 32$; $C = \frac{5}{9}(F 32)$
- 4) $A = \frac{1}{2}bh$; $b = \frac{2A}{h}$
- 5) $I = Prt; \ r = \frac{I}{Pt}$
- 6) $A = \pi r^2$; $r = \sqrt{\frac{A}{\pi}}$
- 7) $C = 2\pi r; \ r = \frac{C}{2\pi}$
- 8) $A = \frac{1}{2}(b_1 + b_2)h$; $h = \frac{2A}{b_1 + b_2}$
- 9) 6ft
- 10) 9ft