

Example 2:

$$P = 2a + 2b$$

1) If we had to solve for P, would we have to do anything? It's already solved for P. P is already by itself on the left side of the equation.

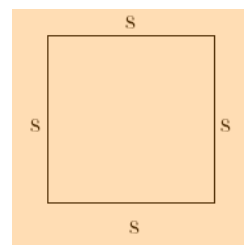
2) Solve for the letter a in $P = 2a + 2b$.

2a) Move the 2b to the left side with subtraction: $P - 2b = 2a$

2b) Divide both sides by 2 in order to isolate a: $\frac{P - 2b}{2} = \frac{2a}{2}$

simplify:

$$\frac{P - 2b}{2} = a$$



Example 3: Find the length of a side of a square whose perimeter is 32ft.

1) The perimeter of a square is $P = s + s + s + s = 4s$

2) We begin with $P = 4s$ and we solve for s.

Begin with this fact: $P = 4s$

Divide both sides by the number 4: $\frac{P}{4} = \frac{4s}{4}$

Simplify on the right side: $\frac{P}{4} = s$

3) You're told that $P = 32$, so replace P with 32 and get s: $s = \frac{32}{4} = 8$

4) This means the length of one side of the square is 8 feet.