Homework Notes and Solution Example

1. (a): A square has area 9. What is its perimeter?

(b): A square has area A. Write its perimeter as an expression in terms of A.
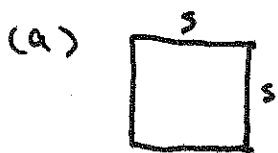
Notes you take in class on this problem may look like:

(a) $s^2 = 9 \Rightarrow s = \sqrt{9} = 3$

$\Rightarrow P = 4 \cdot 3 = 12$

(b) $A = s^2$, $P = 4s$

$A = s^2 \Rightarrow s = \sqrt{A} \Rightarrow P = 4\sqrt{A}$.

A solution you turn in, on the other hand, may look like:

(a) If the square has side length s, the area is s^2. So $s^2 = 9$, so $s = \sqrt{9} = 3$. Now the perimeter is $4s = 4 \cdot 3 = 12$.

(b) Taking s as the side length, we have $s^2 = A$, so $s = \sqrt{A}$. Now the perimeter is $P = 4s = 4\sqrt{A}$.