POWER is the rate at which work happens, which means

$$P = \frac{dW}{dt}$$

capital p →

The units of power are called "Watts" where

$$1\ W = 1\ J/s$$

It is usually easiest to Think of Power in terms of its units:

$$Power = \frac{Energy}{time}$$

Your book does have a secondary equation for power.
Since the definition of work is

$$W = \int \vec{F} \cdot d\vec{x}$$

then $\quad dW = \vec{F} \cdot d\vec{x}$

So That $\quad P = \frac{dW}{dt} = \frac{\vec{F} \cdot d\vec{x}}{dt}$

$$P = \vec{F} \cdot \vec{v}$$

This is useful on one of the homework questions. Think of it as the instantaneous power of the force F when the object being pushed has a velocity of v.