

12/17/12 ACCELERATION PROBLEMS

$$a = \frac{v - v_0}{t}$$

WHAT IF YOU ARE SOLVING FOR
 v ?

$$6 = \frac{v - 2.5}{3}$$

OBJECTIVE: GET v BY ITSELF
ON ONE SIDE; IT MUST BE ON TOP

MULTIPLY BOTH SIDES BY 3

$$6 \cdot 3 = \left[\frac{v - 2.5}{\cancel{3}} \right] \cdot \cancel{3} \quad (v - 2.5) \left(\frac{3}{3} \right)$$
$$(v - 2.5)(1)$$

$$18 = v - \cancel{2.5}$$

$$\begin{array}{r} 2.5 \\ \hline 20.5 = v \end{array} \quad \begin{array}{r} \cancel{+2.5} \\ \hline \end{array}$$

$$v = \boxed{20.5 \text{ m/s Forward}}$$