Name _____ Date _____ Block _____

Physics ↔ Math Worksheet - Algebra and Substitution

Solve the following equations for the variable indicated. There should be enough room to do one step at a time.

1. $v=\frac{x}{t}$ *(for t)*

2. $\frac{1}{2}mv^2=\frac{1}{2}kx^2$ *(for k)*

3. $mgh=\frac{1}{2}mv^2$ *(for v)*

4. $\frac{m_1 v^2}{r}=m_2 gh$ *(for r)*

5. $T=2\pi\sqrt{\frac{L}{g}}$ *(for g)*

6. $m_1 v_1+m_2 v_2=m_1 v_f+m_2 v_f$ *(for v_f)*

7. $x=v_i t+\frac{1}{2}a t^2$ *(for a)*

8. $\frac{1}{R_1}+\frac{1}{R_2}=\frac{1}{R_{eq}}$ *(for R_2)*

9. $m_1(x)=m_2(3-x)$ *(for x)*