Formulas Test 2

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January 14, 2026

The three main formulas for energy

Potential energy: $U(y) = mgh$
Kinetic energy: $K = \frac{1}{2}mv^2$
Spring energy: $U(x) = \frac{1}{2}kx^2$

Chapter 7: Kinetic Energy and Work

$$W = Fd\cos\phi = \vec{F} \cdot \vec{d},$$

$$\Delta K = K_f - K_i = \tfrac{1}{2}m(v_f^2 - v_i^2) = W.$$

$$\text{Work gravity: } W_g = mgd\cos\phi.$$