Kinetic Energy Questions - Answers

Equation: **KE = ½ mv²**

m = mass (kg), v = velocity (m/s)

1. KE = 0.5 × 2 kg × (3 m/s)² = 9.0 J
2. KE = 0.5 × 800 kg × (20 m/s)² = 160000.0 J
3. KE = 0.5 × 100 kg × (5 m/s)² = 1250.0 J
4. KE = 0.5 × 25 kg × (4 m/s)² = 200.0 J
5. KE = 0.5 × 60 kg × (6 m/s)² = 1080.0 J
6. KE = 0.5 × 0.45 kg × (15 m/s)² = 50.62 J
7. KE = 0.5 × 10000 kg × (10 m/s)² = 500000.0 J
8. KE = 0.5 × 500 kg × (8 m/s)² = 16000.0 J
9. KE = 0.5 × 70 kg × (7 m/s)² = 1715.0 J
10. KE = 0.5 × 2.5 kg × (12 m/s)² = 180.0 J

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