

Answers to Practice Exam #1

1. a) 16.1 m/s

b) 0.83 sec

c) 5.1 m

2. a) 15 m/s

b) 2 m/s^2 to the right

c) 2.86 N to the right – source is the 5 kg block

3. a) 35.1 N/m

b) 1.75 m/s^2 – at the amplitude

c) 0.15 m/s – at equilibrium

4. a) KE at A = 1.20 J

b) $v_B = 5.0 \text{ m/s}$

c) $W_{A,B} = 6.30 \text{ J}$