Physics 12 – REVIEW Name: _____ Note that it is always necessary to show all the steps that reflect your reasoning. Convert the following to m/s: 1. 50 km/h 2. 360 km/h 3. 85 m/min 4. 200 km/s Convert the following to km/h: 5. 0.8 m/s 6. 256 m/s

7. 0.04 m/s

8. 25 km/s

KINEMATICS FORMULAE:

Given
$$v = v_0 + at$$
 isolate for a) time

b) acceleration

Given
$$\overline{v} = \frac{v + v_0}{2}$$
 isolate for a) initial velocity

b) final velocity

Given
$$v^2 = v_0^2 + 2ad$$
 isolate for a) initial velocity

- b) acceleration
- c) displacement

Given
$$d = v_0 t + \frac{1}{2}at^2$$
 isolate for a) time when the object is initially at rest

b) acceleration