Name: _____ Date: _____ Hour: _____

Linear Motion Problems Checkpoint

$v = \frac{d}{t}$ $t = \frac{d}{v}$ $d = vt$ $\Delta v = v_f - v_o$ $a = \frac{\Delta v}{t}$ $v = at$ $v = gt$ $d = \frac{1}{2}gt^2$ $t = \sqrt{\frac{2d}{g}}$

1. What is the speed of a jet plane that travels 528 meters in 4 seconds?

2. How many seconds will it take for a satellite to travel 450 m at a rate of 120 m/s?

3. A meteoroid changed velocity from 1.0 km/s to 2.0 km/s in 0.1 seconds. What is the acceleration of the meteoroid?

4. A ball is dropped from the top of the bleachers and it takes 2.5 s to reach the ground. How high are the bleachers?

5. You drop your pencil from your desk, which is 1.5 m above the floor. How long does it take for the pencil to hit the floor?