

Name

Date

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Kinematic Practice 2

$$d = vt$$

$$v_f = v_i + at$$

1) An object is moving at 25 mph for 50 minutes. How far does it go?

2) What is the final speed if an object moving at 40 m/s accelerates at 12 m/s^2 for 2.3 s?

3) What is the acceleration if an object goes from 10 m/s to 40 m/s in 4.8 s?

4) How far does an object travel if it moves at 5 m/s for 3.5 minutes?

5) An object starts at rest. It accelerates at 5 m/s^2 for 7 seconds. How far has it gone?

6) An object accelerates as it travels 300 m in 5 s. Its final speed was 90 m/s. What was the initial speed?

7) An accelerating object, starting from rest moved 40 m in 10 s. What was the acceleration?

Answers 1) 20.75 miles 2) 67.6 m/s 3) 6.25 m/s^2 4) 1,050 m 5) 122.5 m 6) 30 m/s 7) 0.8 m/s^2