

1. Mass of an object varies inversely with its velocity. An object with a mass of 15kg is moving with a velocity of 32 ft/s.

- a. Write an inverse variation equation.
- b. Find the mass when the velocity is 40 ft/s.

2. Your distance from lightning varies directly with the time it takes for you to hear the thunder. If you hear thunder 2.4 seconds after seeing a lightning bolt, you are about 12miles from the lightning.

- a. Write a direct variation equation.
- b. Find the your distance from a lightning bolt if you hear the thunder in 0.5 seconds.