NAME

Module 16 Solving Rational Equations
Lesson 3 Solving Problems Using Inverse
Variation

Set 1

1. Is this an inverse variation?

x	y
5	12
15	4
11	6

2. Does *y* vary inversely as *x*?

x	y
2	28
−7	−8
4	14

3. Write an equation for the inverse variation.

x	y
2	28
−7	−8
4	14

Set 2

1. The time needed to paint a fence varies inversely as the number of people painting. If three people paint the fence in 10 hours, how long would it take six people to paint the fence?

2. The frequency of a radio signal varies inversely as the signal's wavelength. A 1,200 kilohertz signal has a wavelength of 250 meters. What is the frequency of a signal with a wavelength of 400 meters?

3. For a constant voltage, the current through a circuit varies inversely as the resistance. The current is 18 amperes when the resistance is 12 ohms. What is the current when the resistance is 27 ohms?

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