Algebra II

V-3

Inverse and Joint Variation

Translate the following into mathematical equations.

y varies directly as *x*.

y varies inversely as x.

a varies jointly as *b* and *c*.

Solve. (pg. 360)

*1) Suppose *r* varies jointly as *s* and *t* and inversely as the square of *v*. When t = 3, and s = 18, and v = 5, r = 3.78. Find *r* when t = 4, s = 12, and v = 4.

Solve. (pg 361)

1) The frequency of a radio signal varies inversely as the wave length. A signal of frequency 1200 kilohertz (kHz), which might be the frequency of an AM radio station, has wave length 250 m. What frequency has a signal of wave length 400 m?



hint: for #6 on the word problems, read the instructions on the previous page: