

NOTES SECTION 9.1: INVERSE AND JOINT VARIATION

DIRECT VARIATION

INVERSE VARIATION

EXAMPLE 1

Do x and y show direct variation, inverse variation, or neither?

a)	b)
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a)	b)
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EXAMPLE 2

x and y vary inversely, and _____ when _____.

a) Write an equation that relates x and y.	b) Find y when _____.
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EXAMPLE 3

The volume of gas in a container varies inversely with the amount of pressure. A gas has volume _____ in³ at a pressure of _____ lb/in². Write a model relating volume and pressure.

EXAMPLE 4

Do these data show inverse variation? If so, find a model.

W					
H	9	4.5	3	2.25	1.8

JOINT VARIATION**EXAMPLE 5**

Write an equation.

a) ___ varies directly with x and inversely with z^2

b) y varies directly with ___ and inversely with z

c) y varies inversely with ___.

d) z varies jointly with ___ and y

e) y varies inversely with ___ and z

EXAMPLE 6