

(2) If y varies directly to x, when y=100 and x=6 write an equation

y = kx

Replace x and y

100 = k(6)

plug in k to y = kx

50/3 = 100/6 = k

y = 50/3 x OR y = 50x/3

(3) If y=10 and x=.02 in direct variation Find y if x=5.

Steps

1) Replace x and y to find constant

y = kx -> 10 = k(.02)

2) equation y = 500x

10 = k
.02
500 = k

3) use x=5 to find y = 500(5)
y = 2500

problem (4) If y=60 and x=25 in direct variation Find x if y=20

y = kx

60 = k(25)

60/25 = k -> 12/5

y = 12x/5 5(20) = (12x/5)5

100 = 12x
(25/3) = 100/12 = x