

Name : \_\_\_\_\_

## Constant of Variation - Equation

L2S4

1)  $\frac{8q}{r} - 6p = 0$ . Find the constant of variation if,

a)  $q$  varies jointly with  $r$  and  $p$ . \_\_\_\_\_

b)  $p$  varies directly with  $q$  and inversely with  $r$ . \_\_\_\_\_

2)  $m = 3pn^3$ . Find the constant of variation if,

a)  $m$  varies jointly with  $p$  and  $n$ . \_\_\_\_\_

b)  $p$  varies directly with  $n$ . \_\_\_\_\_

3)  $\frac{9}{ts} = 1$ . Find the constant of variation if,

a)  $s$  varies inversely with  $t$ . \_\_\_\_\_

b)  $t$  varies inversely with  $s$ . \_\_\_\_\_

4)  $7y = 5zx$ . Find the constant of variation if,

a)  $y$  varies jointly with  $z$  and  $x$ . \_\_\_\_\_

b)  $x$  varies directly with  $y$  and inversely with  $z$ . \_\_\_\_\_

5)  $\frac{14d}{g} = \sqrt{h}$ . Find the constant of variation if,

a)  $d$  varies jointly with  $g$  and  $\sqrt{h}$ . \_\_\_\_\_

b)  $g$  varies directly with  $d$  and inversely with  $\sqrt{h}$ . \_\_\_\_\_

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## Constant of Variation - Equation

1)  $\frac{8q}{r} - 6p = 0$ . Find the constant of variation if,

a)  $q$  varies jointly with  $r$  and  $p$ .

$$k = \frac{3}{4}$$


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b)  $p$  varies directly with  $q$  and inversely with  $r$ .

$$k = \frac{4}{3}$$


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2)  $m = 3pn^3$ . Find the constant of variation if,

a)  $m$  varies jointly with  $p$  and  $n^3$ .

$$k = 3$$


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b)  $p$  varies directly with  $m$  and inversely with  $n^3$ .

$$k = \frac{1}{3}$$


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3)  $\frac{9}{ts} = 1$ . Find the constant of variation if,

a)  $s$  varies inversely with  $t$ .

$$k = 9$$


---

b)  $t$  varies inversely with  $s$ .

$$k = 9$$


---

4)  $7y = 5zx$ . Find the constant of variation if,

a)  $y$  varies jointly with  $z$  and  $x$ .

$$k = \frac{5}{7}$$


---

b)  $x$  varies directly with  $y$  and inversely with  $z$ .

$$k = \frac{7}{5}$$


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5)  $\frac{14d}{g} = \sqrt{h}$ . Find the constant of variation if,

a)  $d$  varies jointly with  $g$  and  $\sqrt{h}$ .

$$k = \frac{1}{14}$$


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b)  $g$  varies directly with  $d$  and inversely with  $\sqrt{h}$ .

$$k = 14$$


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