

Q7PT 1 solutions BELOW

Quiz 7 CRN 10113 Math 65 -083: IN.CLASS.ONLY—TAKE HOME POSTED ONLINE, DUE MONDAY
 SEC.7.7 BELOW ON VARIATION --- DIRECT OR INVERSE.

1. y varies *directly* as x . Which of the following equations applies to this problem ? Choose the correct equation from the 2 choices given below and write it down on your paper.

- (i) $y = kx$
- (ii) $y = k/x$

2. Find k in the following problem: y varies directly as x and $y = 55$ when $x = 11$.
 FOLLOW UP: FIND Y WHEN $X = 2$.

3. y varies *inversely* as x . Which of the following equations applies to this problem ? Choose the correct equation from the 2 choices given below and write it down on your paper.

- (i) $y = kx$
- (ii) $y = k/x$

4. Find k in the following problem: y varies inversely as x and $y = 2$ when $x = 6$.
 FOLLOW UP: FIND Y WHEN $X = 3$.

1. (i) $y = kx$

2. $55 = k \cdot 11 \Rightarrow k = \boxed{5}$ by dividing by 11.
 NOW $y = 5 \cdot 2 = \boxed{10}$

3. (ii) $y = \frac{k}{x}$

4. $2 = \frac{k}{6} \Rightarrow k = 2 \cdot 6 = \boxed{12}$

$y = \frac{12}{3} = \boxed{4}$