

Please complete the following problems for homework. Check Mrs. Kent's website for due dates.
THERE MAY BE PROBLEMS ON THE BACK!

1. Determine if the given equation is a representation of direct variation, inverse variation, or neither.

a. $3x + 5y = 0$

d. $8x = 7y + 1$

b. $xy = 16$

e. $y = \frac{9}{x}$

c. $y = \frac{3}{5}x$

f. $y + 2x = y$

2. It is given that q is inversely proportional to p . When $p = 6$, then $q = 16$.
- a. Find the equation connecting p and q .

- b. Hence, find

i. The value of q when $p = 3$

ii. The value of p when $q = 8$

3. It is given that C is inversely proportional to b^2 and $b > 0$. When $b = \frac{1}{2}$, then $C = 40$.

a. Find the equation connecting b and C .

b. Hence, find

i. The value of C when $b = 5$

ii. The value of b when $C = \frac{1}{10}$

4. It is given that M is inversely proportional to x^2 . When $M = 4$, then $x = 6$.

a. Find the equation connecting M and x .

b. Hence, find

i. The value of M when $x = 3$

ii. The value of x when $M = 9$