

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

1. It is given that y is directly proportional to x . When $x = 3$, then $y = 18$.
 - a. Find the equation connecting x and y .

- b. Then find
 - i. The value of y when $x = 12$.

- ii. The value of x when $y = 42$.

2. It is given that V is directly proportional to r^3 . When $r = 4$, then $V = 32$.
 - a. Find the equation connecting r and V .

- b. Then find
 - i. The value of V when $r = 5$.

- ii. The value of r when $V = 108$.

3. It is given that d is directly proportional to t . When $t = 7$, then $d = 245$.
- Find the equation connecting d and t .

- Then find
 - The value of t when $d = 385$.

- The value of d when $t = 18$.

4. It is given that A is directly proportional to u^2 . When $A = 18$, then $u = 3$.
- Find the equation connecting A and u .

- Then find
 - The value of A when $u = 4$.

- The value of u when $A = 288$.