Math6 – Unit 4 Direct Proportions

(I) Independent variables - a variable whose variation _does not_ depend on another. The independent variable can be any number you choose. Is the input and the __X__.

(D) Dependent variable – a variable that does _depend_ on the independent variable.

Constant of _____ - when x is proportional to the quantity y.

$$D \nearrow y = k x \nwarrow I$$

Identify the independent and dependent variables:

1. Driving miles and using gallons gas
   Independent ___miles___ Dependent ___gallons___

2. Total price and number of shirts purchased
   Independent ___# of shirts___ Dependent ___price___

3. Purchasing gallons and cost for gas
   Independent ___gallons___ Dependent ___Cost___

4. Ethan gets 50 likes for every Instagram post.
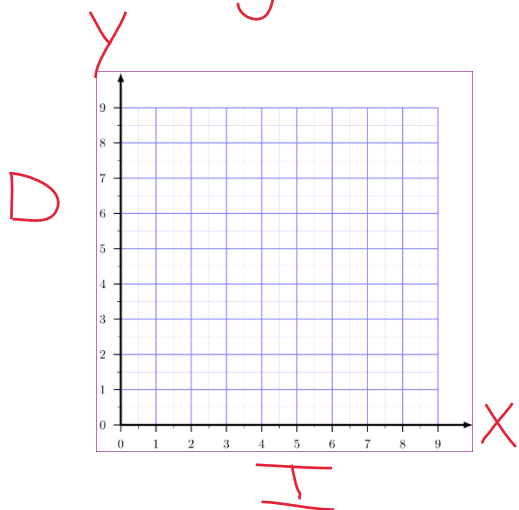   Independent ___post___ Dependent ___likes___

5. For every 10 cookies you will receive a free lemonade.
   Independent ___Cookies___ Dependent ___lemonade___

6. Each guest at the party will eat two cupcakes.
   Independent ___guests___ Dependent ___Cupcakes___

Y

D

I

| I | D |
X (guests)	y (cupckaes)
1	2
3	6
in	out