

**Unit B      Gradients and Y- Intercepts**

Q1.    A) Find the gradient and Y –intercept of the line  $Y = 3X - 7$

Gradient: \_\_\_\_\_

Y- Intercept:.....

B) Write down the **gradient** of Line **Parallel** to  $Y = 3X - 7$

.....

C) Write down **equation** of a line **perpendicular** to  $Y = 3X - 7$

.....

Q2.    A) Find the gradient and Y –intercept of the line  $Y = 4X - 2$

Gradient: \_\_\_\_\_

Y- Intercept:.....

B) Write down the **gradient** of Line **Parallel** to  $Y = 4X - 2$

.....

C) Write down **equation** of a line **perpendicular** to  $Y = 4X - 2$

.....

Q3 A) Find the gradient and Y –intercept of the line  $2Y = 3X - 8$

Gradient: \_\_\_\_\_

Y- Intercept:.....

B) Write down the **gradient** of Line **Parallel** to  $2Y = 3X - 8$

.....

C) Write down **equation** of a line **perpendicular** to  $2Y = 3X - 8$

.....

Q4. A) Find the gradient and Y –intercept of the line  $3Y = 3X + 9$

Gradient: \_\_\_\_\_

Y- Intercept:.....

B) Write down the **gradient** of Line **Parallel** to  $3Y = 3X + 9$

.....

C) Write down **equation** of a line **perpendicular** to  $3Y = 3X + 9$

.....

Q5. A) Find the gradient and Y –intercept of the line  $Y + 2x = 5$

Gradient: \_\_\_\_\_

Y- Intercept:.....

B) Write down the **gradient** of Line **Parallel** to  $Y + 2x = 5$

.....

C) Write down **equation** of a line **perpendicular** to  $Y + 2x = 5$

.....

Q6. A) Find the gradient and Y –intercept of the line  $3Y + 2x = 9$

Gradient: \_\_\_\_\_

Y- Intercept:.....

B) Write down the **gradient** of Line **Parallel** to  $3Y + 2x = 9$

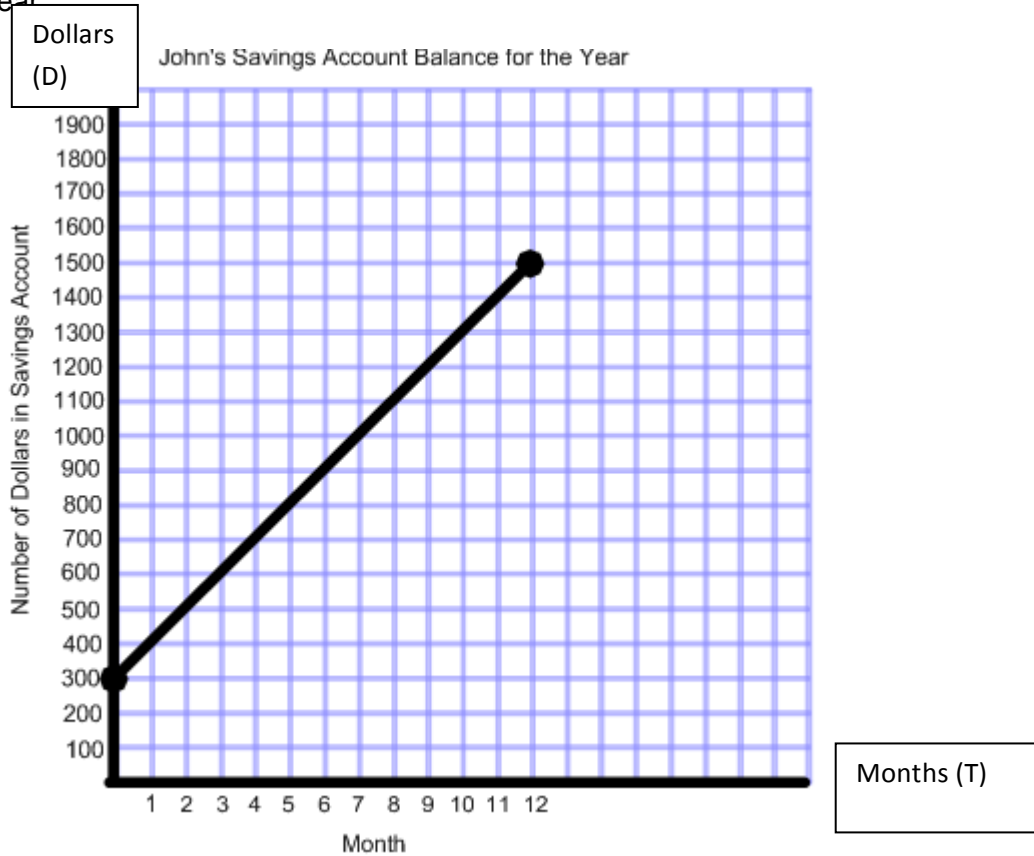
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C) Write down **equation** of a line **perpendicular** to  $3Y + 2x = 9$

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Using Gradients and y- Intercept in context

This graph shows how John's savings account balance has changed over the course of a year

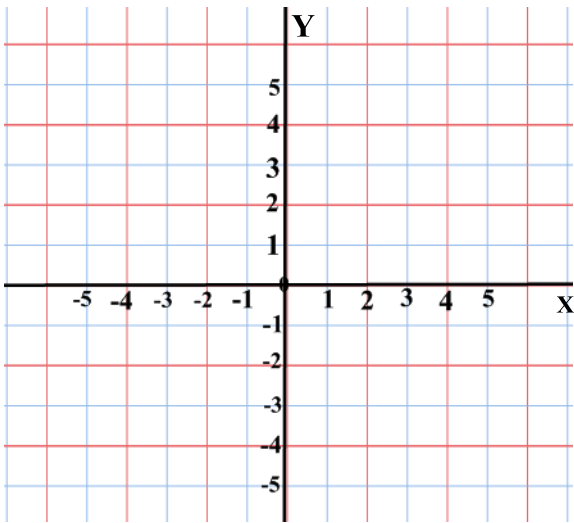


- a) How much money John had in his account at the beginning of the year?  
.....
- b) Calculate the gradient of the Graph.  
.....
- c) Write down the equation of your graph in the form  $D = mT + c$
- d) At what rate balance in his account changing every month.

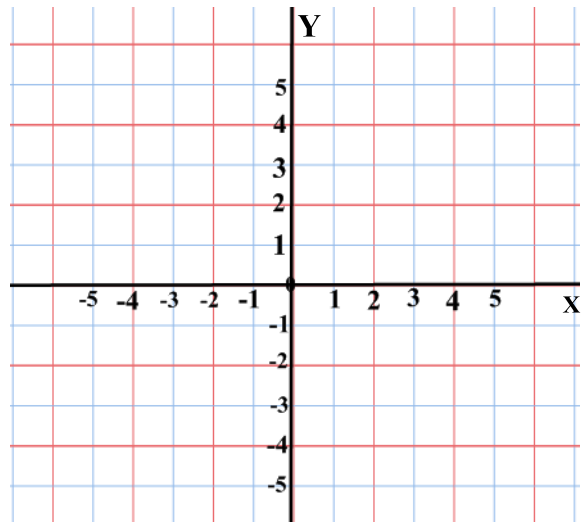
Draw Graphs of the equations in the form

$$Y = MX + C$$

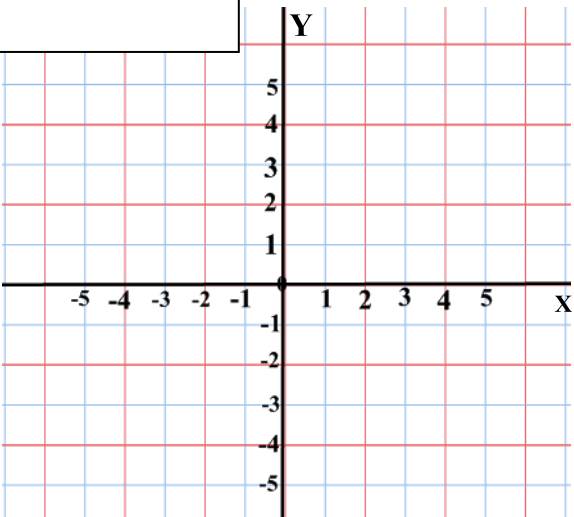
A)  $Y = 2X + 1$



C)  $Y = 3X - 3$



B)  $Y = X - 3$



D)  $Y = -2X + 1$

