



Test in/ Examen de : .....

Name/Le nom : .....

Class/ La Classe: .....

Time / La durée : .....

Date / La date: .....

Exercice 3

1 a)  $\frac{1}{2}y + 2x - 2 = -1$

$\frac{1}{2}y = -2x + 2 - 1$

$\frac{1}{2}y = -2x + 1$

(d):  $y = -4x + 2$  (shown)  $\left(\frac{1}{2}\right)$

b) I intersection of (d) with x-axis so  $y_I = 0$   $\left(\frac{1}{2}\right)$

thus  $-4x_I + 2 = 0$   $x_I = \frac{1}{2}$

$I\left(\frac{1}{2}, 0\right)$

J intersection of (d) with y-axis so  $x_J = 0$  &  $y_J = b = 2$

$J(0; 2)$   $\left(\frac{1}{2}\right)$

state it

c) A point belongs to a straight line when its coordinates verify the equation of the straight line

$y_D = -4x_D + 2$

$-4x_D + 2 = -4(2) + 2 = -8 + 2 = -6 = y_D$   $\left(\frac{1}{4}\right)$

thus D belongs to (d)

2 a) P is the symmetric of D with respect to the ordinate axis

thus  $y_P = y_D = -6$  and  $x_P = -x_D = -2$   $\left(\frac{1}{4}\right)$   
 $P(-2, -6)$

Q is the symmetric of P with respect to x-axis

so  $x_Q = x_P = -2$  and  $y_Q = -y_P = -(-6) = +6$

$Q(-2, +6)$   $\left(\frac{1}{4}\right)$

p. age 5

$-\frac{1}{4}$  if coord are not written.