

**A line with a slope of  $\frac{3}{4}$  passes through the point (12; 8). Write its equation in slope-intercept form.**

The slope intercept form, is the same things as “  $y = mx + b$  ” form

To write the equation of the line  $y=mx+b$  form, we needs to know the value of m and b.

We know the value of **m** ->  $\frac{3}{4}$  écrire en haut de  $y = mx + b$

To find b, we replace y and x by the coordinates of the point. Here, (12; 8)

**(x;y) -> (12;8)** écrire en bas de la précédente inscription

$$y = mx + b$$

$$8 = \frac{3}{4} (12) + b$$

$$8 = 9 + b$$

$$-9 \quad -9$$

$$-1 = b$$

$$y = \frac{3}{4} x - 1$$

**So the equation of the line is  $y= \frac{3}{4} x - 1$**