

①

$$\left. \begin{aligned} x \cdot y &= 540 \\ (x+6) \cdot (y-3) &= 540 \end{aligned} \right\} x = \frac{540}{y}$$

$$x = \frac{540}{18}$$

$$\boxed{x = 30}$$

$$\left(\frac{540}{y} + 6\right) \cdot (y-3) = 540$$

$$\frac{540y}{y} + \frac{-3 \cdot 540}{y} + 6y - 18 = 540$$

$$\frac{540y}{y} + \frac{-1620}{y} + \frac{6y^2}{y} - \frac{18y}{y} = \frac{540y}{y}$$

$$6y^2 - 18y - 1620 = 0$$

$$\frac{18 \pm \sqrt{18^2 - 4 \cdot 6 \cdot (-1620)}}{2 \cdot 6} = \frac{18 \pm \sqrt{324 + 38880}}{12}$$

$$\frac{18 \pm \sqrt{39204}}{12} \left\{ \begin{aligned} \frac{18 + 198}{12} &= \boxed{18 = y} \\ \frac{18 - 198}{12} &= -15 \text{ (No se usa)} \end{aligned} \right.$$

Los alumnos que van son 30 y cada uno paga 18€

Enfadada
Matina X K