

$$\begin{cases} 5x - 4y = 9 \\ x + 3 = 2y \end{cases}$$

$$\begin{cases} 5x - 9 = 4y \\ x + \frac{3}{2} = \frac{2y}{2} \end{cases}$$

$$\begin{cases} \frac{5x}{4} - \frac{9}{4} = \frac{4y}{4} \\ \frac{x}{2} + \frac{3}{2} = y \end{cases}$$

$$\begin{cases} \frac{5}{4}x - \frac{9}{4} = y \\ \frac{x}{2} + \frac{3}{2} = y \end{cases}$$

$$\frac{5}{4}x - \frac{9}{4} = \frac{x}{2} + \frac{3}{2}$$

$$\frac{5}{4}x - \frac{x}{2} = \frac{3}{2} + \frac{9}{4}$$

$$\frac{5x - 2x}{4} = \frac{6 + 9}{4}$$

$$\frac{3x}{4} = \frac{15}{4}$$

$$\frac{3x}{3} = \frac{15}{3}$$

$$x = 5$$

$$5(5) - 4y = 9$$

$$25 - 4y = 9$$

$$25 - 9 = 4y$$

$$\frac{16}{4} = \frac{4y}{4}$$

$$4 = y$$

$$\begin{cases} x + 2y = 5 \\ 3x + 6y = 12 \end{cases}$$

↓

$$\begin{cases} x - 5 = -2y/-2 \\ 3x - 12 = -6y/-6 \end{cases}$$

↓

$$\begin{cases} \frac{x}{-2} - \frac{5}{-2} = y \\ \frac{3x}{-6} - \frac{12}{-6} = y \end{cases}$$

↓

$$\frac{x}{-2} - \frac{5}{-2} = \frac{3x}{-6} - \frac{12}{-6}$$

↓

$$\frac{(x-5) \cdot 3}{-2 \cdot 3} = \frac{3x-12}{-6}$$

↓

$$\frac{3x-15}{-6} = \frac{3x-12}{-6}$$

$$3x - 15 = 3x - 12$$

$$3x - 3x = -12 + 15$$

$$x = 3$$

$$3(3) + 6y = 12$$

$$9 + 6y = 12$$

$$9 - 12 = -6y$$

↓

$$\frac{-3}{-6} = \frac{-6y}{-6}$$

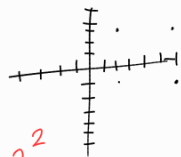
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$$\frac{1}{2} = y$$

# Revision Intra

P.167 # 4.21

a)  $(2; -1)$



$2; 3$        $6; 3$   
 $2; -1$        $6; -1$   
•  $(4; 1)$

b)  $(x-4)^2 + (y-1)^2 = 2^2$

# 4.16

h)  $x^2 + y^2 + 8x - 6y = 0$

↓

$$(x^2 + 8x) + (y^2 - 6y) = 0$$

$$\left(\frac{8}{2}\right)^2 = 16 \quad \left(\frac{-6}{2}\right)^2 = 9$$

$$(x^2 + 8x + 16 - 16) + (y^2 - 6y + 9 - 9) = 0$$

$$(x^2 + 8x + 16) - 16 + (y^2 - 6y + 9) - 9 = 0$$

$$(x^2 + 8x + 16) + (y^2 - 6y + 9) - 25 = 0$$

$$(x + 4)^2 + (y - 3)^2 - 25 = 0$$

$$(x + 4)^2 + (y - 3)^2 = 25 = 5^2$$

$$(x - (-4))^2 + (y - 3)^2 = 5^2$$

$$C(h; k) = (-4; 3) \rightarrow R = 5$$

i)  $x^2 + 8x + y^2 + 10y + 15 = 0$

↓

$$(x^2 + 8x) + (y^2 + 10y) + 15 = 0$$

↓

$$(x^2 + 8x) + (y^2 + 10y) = -15$$

↓

$$\left(\frac{8}{2}\right)^2 = 16 \quad \left(\frac{10}{2}\right)^2 = 25$$

↓

$$(x^2 + 8x + 16 - 16) + (y^2 + 10y + 25 - 25) = -15$$

↓

$$(x^2 + 8x + 16) + (y^2 + 10y + 25) - 41 = -15$$

↓

$$(x^2 + 8x + 16) + (y^2 + 10y + 25) = 26$$

$$(x^2 + 8x + 16) + (y^2 + 10y + 25) = 26$$

↓

$$(x + 4)^2 + (y + 5)^2 = 26$$

↓

$$(x - (-4))^2 + (y - (-5))^2 = (\sqrt{26})^2$$

$$C(-4; -5) \quad R = \sqrt{26}$$

# 4.15

f)  $C(h; k) = (0; -1)$  et  $R = \sqrt{5}$

$$(x-0)^2 + (y-(-1))^2 = (\sqrt{5})^2$$

$\Downarrow$

$$x^2 + (y+1)^2 = 5$$

c)  $C(-1; 2)$   $R = \sqrt{2}$

$$(x-(-1))^2 + (y-2)^2 = (\sqrt{2})^2$$

$\Downarrow$

$$(x+1)^2 + (y-2)^2 = 2$$

P. 188 # 4.40

Jerome	loue auto	3jour	roule	175 Km	paye	125 \$
		5jour		400 Km		250 \$
		y	+	x	=	z

$$\begin{cases} 3y + 175x = 125 \\ 5y + 400x = 250 \end{cases}$$

P. 195 # 4.35

d)  $\begin{cases} 2x + 5y = 15 \\ 4x + 10y = 20 \end{cases}$

$$\begin{cases} 2x - 15 = -5y \quad / -5 \\ 4x - 20 = -10y \quad / -10 \end{cases}$$

$$\begin{cases} \frac{2}{-5}x - \frac{15}{-5} = y \\ \frac{4}{-10}x - \frac{20}{-10} = y \end{cases}$$

$$\frac{(2x-15) \cdot -2}{-5 \cdot -2} = \frac{4x-20}{-10}$$

$\Downarrow$

$$\frac{-4x-30}{-10 \cdot -10} = \frac{4x-20}{-10 \cdot -10}$$

$$-4x-30 = 4x-20$$

$\Downarrow$

$$-4x-4x = -20+30$$

$$\frac{-8x}{-8} = \frac{10}{-8}$$

$$x = \frac{10}{-8}$$

$$4\left(\frac{10}{-8}\right) - 20 = -10y$$

$$\frac{-25}{-10} = \frac{-10y}{-10}$$

$$\frac{5}{2} = y$$