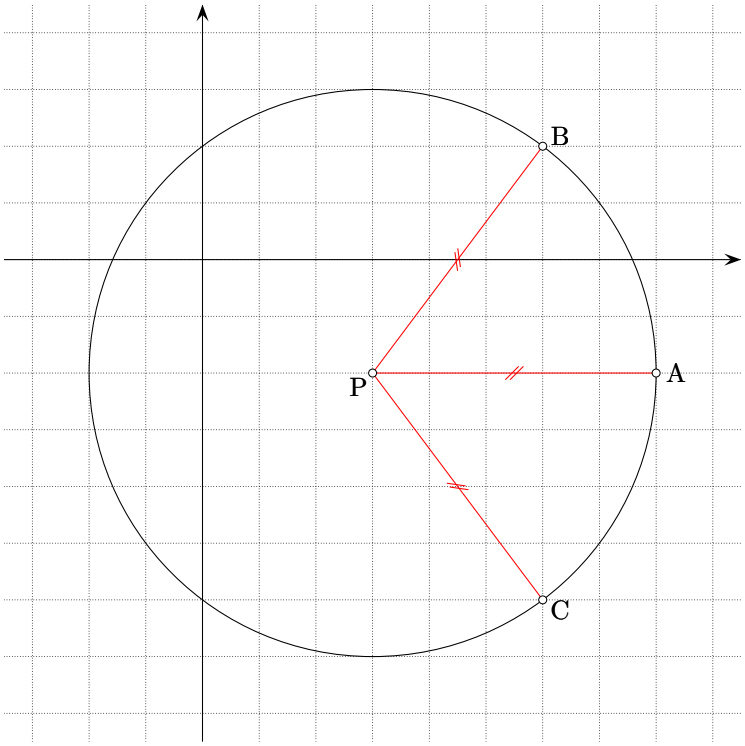
9.2



Il faut vérifier que le centre du cercle P est équidistant des points A, B et C. En d'autres termes, on doit s'assurer que $\|\overrightarrow{PA}\| = \|\overrightarrow{PB}\| = \|\overrightarrow{PC}\|$.

$$\|\overrightarrow{PA}\| = \left\| \begin{pmatrix} 8-3 \\ -2-(-2) \end{pmatrix} \right\| = \left\| \begin{pmatrix} 5 \\ 0 \end{pmatrix} \right\| = \sqrt{5^2+0^2} = \sqrt{25+0} = \sqrt{25} = 5$$

$$\|\overrightarrow{PB}\| = \left\| \begin{pmatrix} 6-3 \\ 2-(-2) \end{pmatrix} \right\| = \left\| \begin{pmatrix} 3 \\ 4 \end{pmatrix} \right\| = \sqrt{3^2+4^2} = \sqrt{9+16} = \sqrt{25} = 5$$

$$\|\overrightarrow{PC}\| = \left\| \begin{pmatrix} 6-3 \\ -6-(-2) \end{pmatrix} \right\| = \left\| \begin{pmatrix} 3 \\ -4 \end{pmatrix} \right\| = \sqrt{3^2+(-4)^2} = \sqrt{9+16} = \sqrt{25} = 5$$