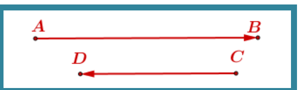
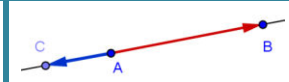
$$z_D - z_C = k(z_B - z_A) \Leftrightarrow \overrightarrow{CD} = k\overrightarrow{AB} \Leftrightarrow (AB)//(CD)$$

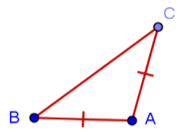


$$z_C - z_A = k(z_B - z_A) \Leftrightarrow \overrightarrow{AC} = k\overrightarrow{AB} \Leftrightarrow$$

A , B , C Alignés



$$\frac{z_C - z_A}{z_B - z_A} = re^{i\alpha} \Leftrightarrow \left(\frac{AC}{AB} = r \text{ et } (\widehat{\overrightarrow{AB},\overrightarrow{AC}}) = \alpha[2\pi] \right)$$

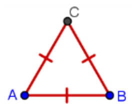


$$\Leftrightarrow \left|\frac{z_C - z_A}{z_B - z_A}\right| = 1$$

Triangle Isocèle

$$\text{Arg}\left(\frac{z_C - z_A}{z_B - z_A}\right) = \pm\frac{\pi}{2} \Leftrightarrow$$

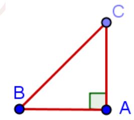
Triangle Rectangle



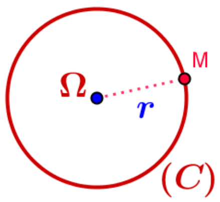
$$\Leftrightarrow \frac{z_C - z_A}{z_B - z_A} = e^{\pm i\frac{\pi}{3}}$$

Equilatèral

$$\frac{z_C - z_A}{z_B - z_A} = e^{\pm i\frac{\pi}{2}} \Leftrightarrow$$



Rectangle Isocèle



$$M(z) \in (C)$$

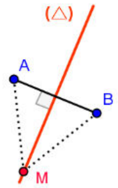
$$\chi$$

$$|z - z_\Omega| = r$$

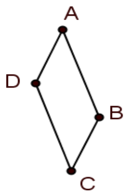
$$M(z) \in (\Delta)$$

$$\chi$$

$$|z - z_A| = |z - z_B|$$



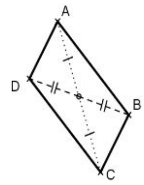
Parallélogramme

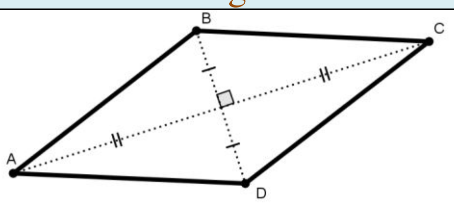
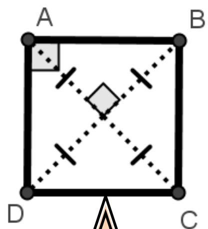
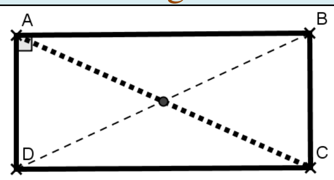


(ABCD est un parallélogramme) $\Leftrightarrow \overrightarrow{AB} = \overrightarrow{DC} \Leftrightarrow z_B - z_A = z_C - z_D$

(ABCD est un parallélogramme) $\Leftrightarrow$ [AC] et [BD] ont même milieu

$$\Leftrightarrow \frac{z_A + z_C}{2} = \frac{z_B + z_D}{2}$$



Losange	Carré	Rectangle
		

Parallélogramme dont les diagonales sont perpendiculaires

Parallélogramme dont les diagonales sont isométriques

Parallélogramme dont les côtés sont isométriques

Rectangle et Losange

Parallélogramme qui a un angle droit.