

(d) F1-A \vec{AC} in terms of \vec{AB} & $\vec{A'B'}$.

\therefore write \vec{AC} as a linear combination of \vec{AB} & $\vec{A'B'}$.

Since $\vec{OA} = \vec{OC'}$ (by translation)

Then $AC'CD$ is a parallelogram

$$\text{Then } \vec{AC} = \vec{AD} + \vec{AC'}$$

but $\vec{AC'} = 2\vec{AB}$ (B is the midpt of AC')

$$\vec{AC'} = 2\vec{A'B'} \quad (\vec{AB} = \vec{A'B'} \text{ (translation)})$$

$$\therefore \text{Then } \vec{AC} = \vec{AD} + 2\vec{A'B'}$$

Ex 8