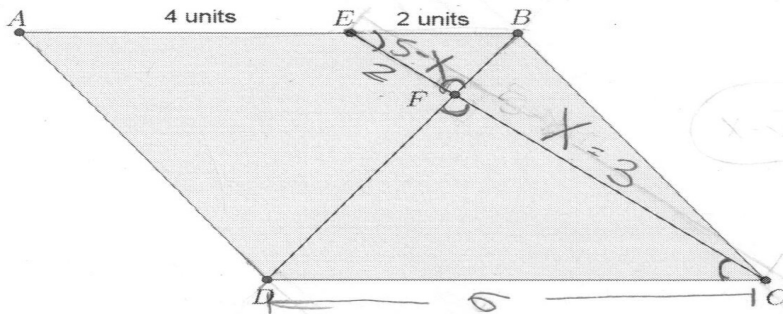


ABCD is a parallelogram, EC is 5 units.



a) Identify a pair of similar triangles in the diagram.

$\triangle EBF$ & $\triangle CDF$

b) Explain why the triangles you named are similar.

They are vertical triangles; $\triangle EBF$ and $\triangle CDF$ are similar by ASA.

c) Find the length of FC. Show all of your work and leave your answer exact.

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

$$5-x = 2 =$$

$$5-x^2 = 12$$

$$-5 \quad -5$$

$$\sqrt{-x^2} = 3$$

$$\boxed{x = 3}$$