BF ‖ CD, if the screen is far from the slits (L>> d).
(I know that parallel lines can't meet in a point,
but they are so close to parallel that you can't tell the
difference.)

So angle AEB = angle ADC = 90°.

Angle ABE' also = 90°.

$\Theta_1 = \Theta_2$, since both are complements of angle ABE.

So, $\sin \Theta_1 = \sin \Theta_2 = \sin \Theta = \dfrac{x}{L} = \dfrac{\lambda}{d}$

$$\boxed{\dfrac{x}{L} = \dfrac{n\lambda}{d}}$$ where n is the order of the dark fringe, numbered from the center.

The center maximum is 2x wide.