Exploring Trigonometric Ratios Investigation Worksheet

Step 1: Fill in the table below with the values observed with no changes to the triangles

$\dfrac{Opposite}{Hypotenuse}$	$\dfrac{a}{b} =$	$\dfrac{d}{e} =$	Sin a =
$\dfrac{Adjacent}{Hypotenuse}$	$\dfrac{c}{b} =$	$\dfrac{f}{e} =$	Cos a =
$\dfrac{Opposite}{Adjacent}$	$\dfrac{a}{c} =$	$\dfrac{d}{f} =$	Tan a =

Step 2: Drag point A or C to a new position and observe the change in the values. Complete the table below with the new values.

$\dfrac{Opposite}{Hypotenuse}$	$\dfrac{a}{b} =$	$\dfrac{d}{e} =$	Sin a =
$\dfrac{Adjacent}{Hypotenuse}$	$\dfrac{c}{b} =$	$\dfrac{f}{e} =$	Cos a =
$\dfrac{Opposite}{Adjacent}$	$\dfrac{a}{c} =$	$\dfrac{d}{f} =$	Tan a =

Step 3: Click on the show angles box in the top right corner? What do you notice about the angles in both triangles?

Step 4: Drag point F to a new position. What did you observe about the trigonometric ratios?