MAKING CONNECTIONS (SAMPLE RESPONSES)

Calculator Time

Use your results from your Right Triangle Exploration handout to complete the first column of the table below. Then use your calculator to complete the remaining three columns.

Reference Angle Measure	Sine	Cosine	Tangent
$m\angle XYZ = 33°$	$\sin(33°) = 0.54$	$\cos(33°) = 0.84$	$\tan(33°) = 0.65$
$m\angle KAB = 28°$	$\sin(28°) = 0.47$	$\cos(28°) = 0.88$	$\tan(28°) = 0.53$
$m\angle LAC = 28°$	0.47	0.88	0.53
$m\angle MAD = 28°$	0.47	0.88	0.53
$m\angle BKA = 62°$	$\sin(62°) = 0.88$	$\cos(62°) = 0.47$	$\tan(62°) = 1.88$
$m\angle CLA = 62°$	0.88	0.47	1.88
$m\angle DMA = 62°$	0.88	0.47	1.88

Connections Time

Compare the table above with the completed table on your Right Triangle Exploration handout. What patterns or similarities do you see?

The $\cos(28°)$ is about the same value as Ratio 1.

The $\sin(28°)$ and Ratio 2 are both about 0.5.

The $\sin(28°)$ and $\cos(62°)$ are the same.

$\cos(28°) = \sin(62°)$

Ratio 3 $\approx \tan(62°)$

$\tan(28°) \approx$ *Ratio 4*