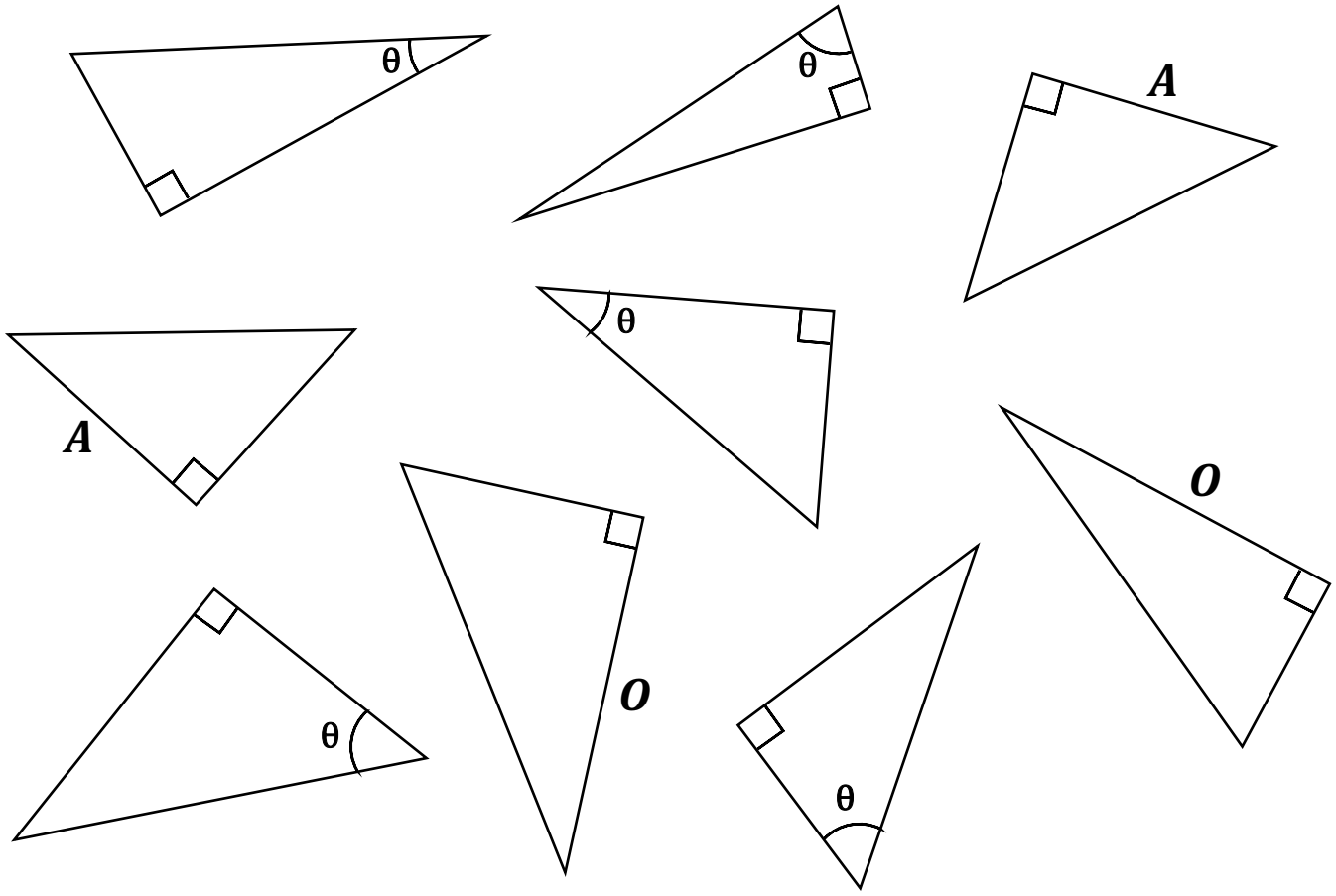
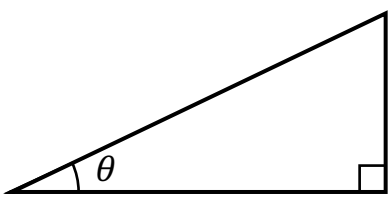
Task 1: Label each triangle with $\boldsymbol{O}$ (opposite), $\boldsymbol{A}$ (adjacent), $\boldsymbol{H}$ (hypotenuse), and $\boldsymbol{\theta}$ (angle).



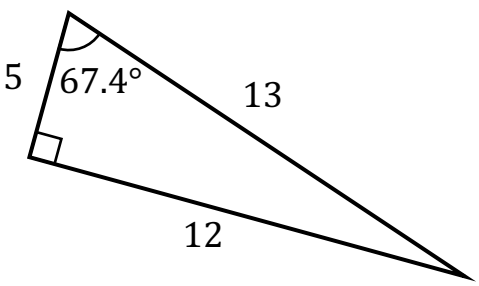
Task 2: Defining sine, cosine, and tangent.



$\sin(\theta) =$

$\cos(\theta) =$

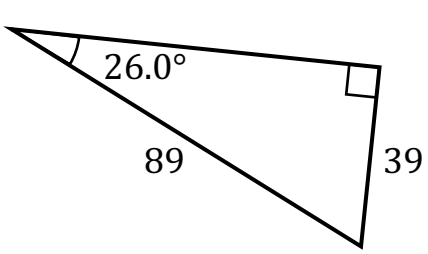
$\tan(\theta) =$



$\sin(67.4°) =$

$\cos(67.4°) =$

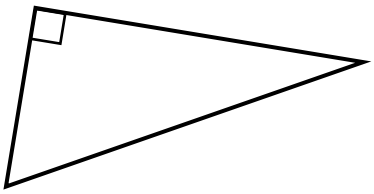
$\tan(67.4°) =$



$\sin(26.0°) =$

$\cos(26.0°) =$

$\tan(26.0°) =$

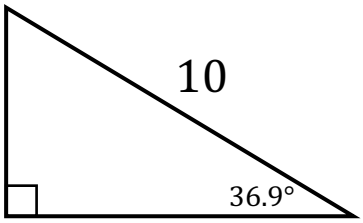


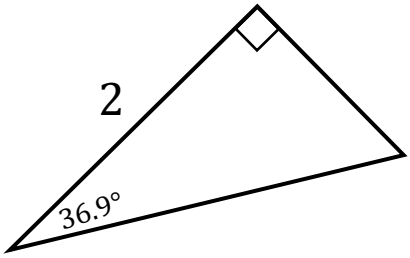
$\sin(36.9°) = \frac{3}{5}$

$\cos(36.9°) =$

$\tan(36.9°) =$

Task 3: Working backwards – Fully label each triangle.

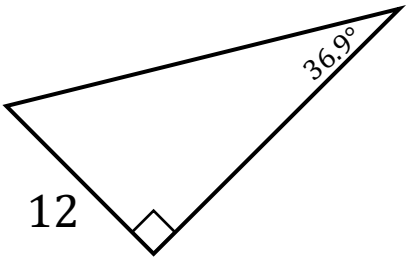


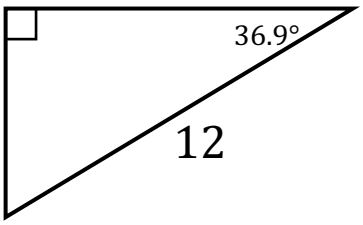


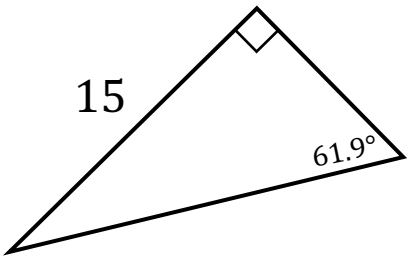
$\sin(36.9°) = \frac{3}{5}$

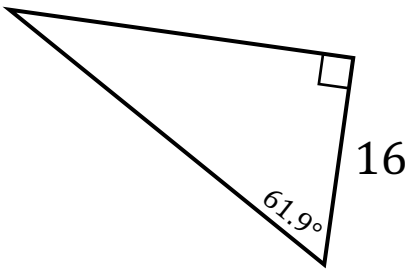
$\cos(36.9°) = \frac{4}{5}$

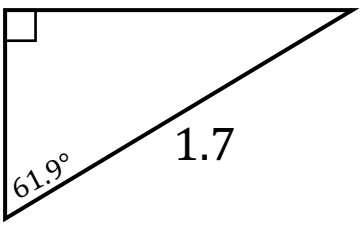
$\tan(36.9°) = \frac{3}{4}$







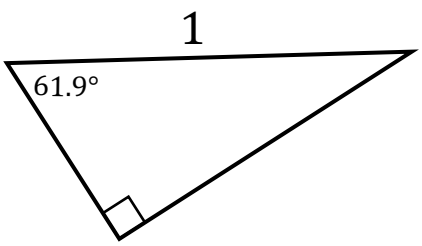


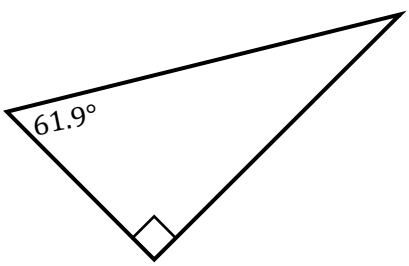


$\sin(61.9°) = \frac{15}{17}$

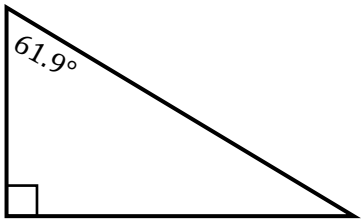
$\cos(61.9°) =$

$\tan(61.9°) =$



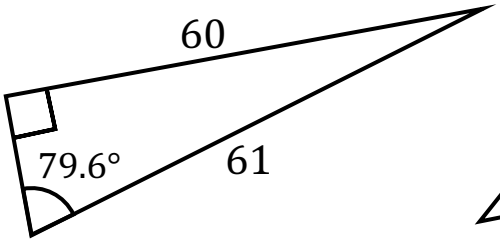


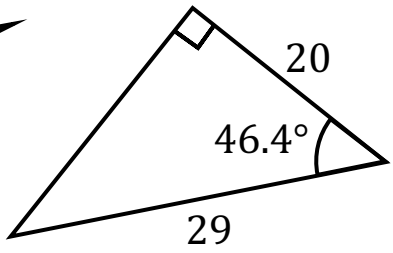
Perimeter = 120

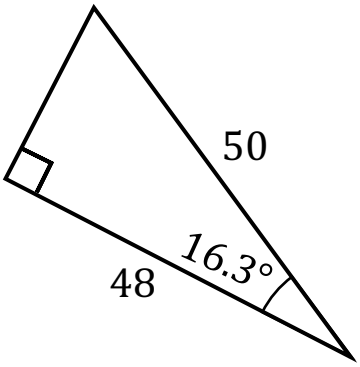


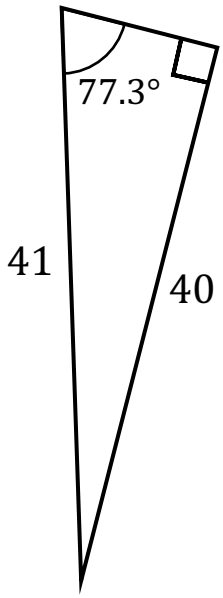
Area = 15

Task 4: Bringing it together 1 – Use the triangles to complete the table.



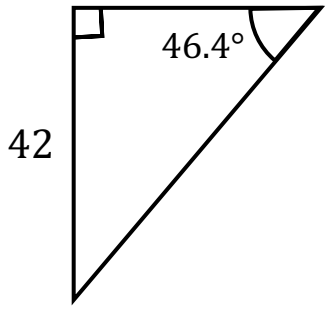


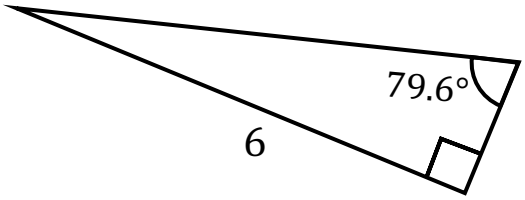


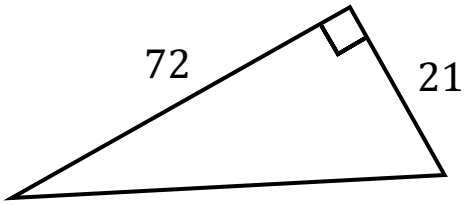


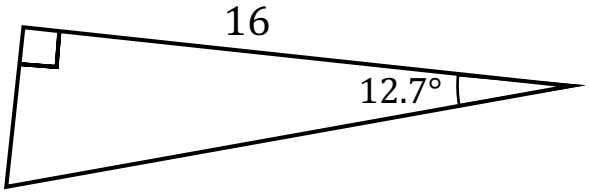
$\boldsymbol{\theta}$	$\sin(\boldsymbol{\theta})$	$\cos(\boldsymbol{\theta})$	$\tan(\boldsymbol{\theta})$
79.6°			
	$\frac{21}{29}$		
		$\frac{24}{25}$	
			$\frac{40}{9}$
			$\frac{9}{40}$

Task 5: Bringing it together 2 – Use the table above to complete the triangles.

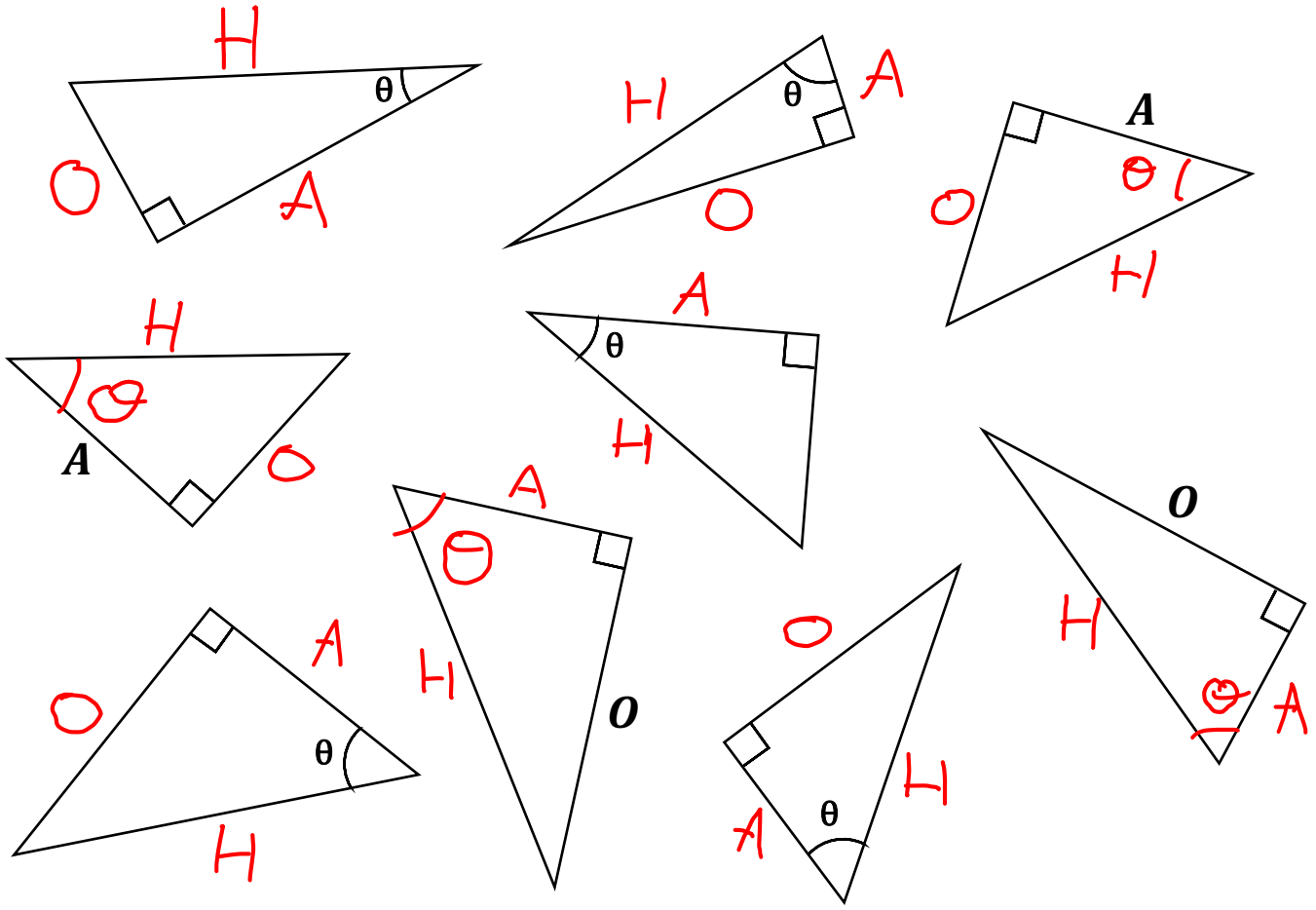




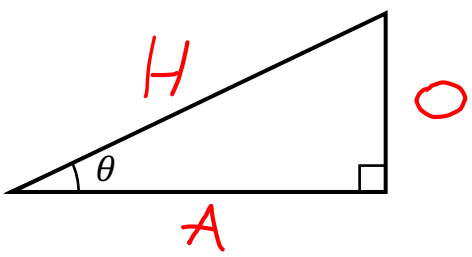




Task 1: Label each triangle with ***O*** (opposite), ***A*** (adjacent), ***H*** (hypotenuse), and ***θ*** (angle).



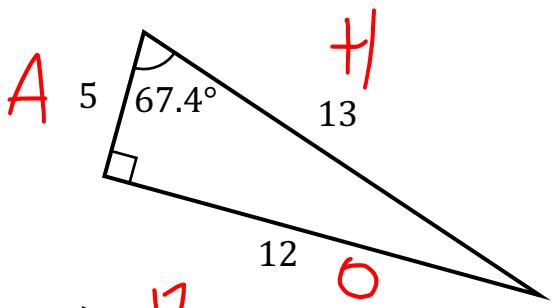
Task 2: Defining sine, cosine, and tangent.



$\sin(\theta) =$ O/H

$\cos(\theta) =$ A/H

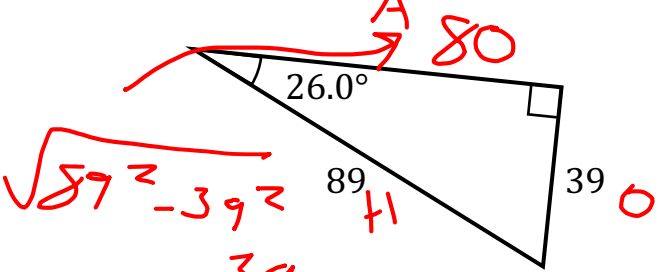
$\tan(\theta) =$ O/A



$\sin(67.4°) =$ 12/13

$\cos(67.4°) =$ 5/13

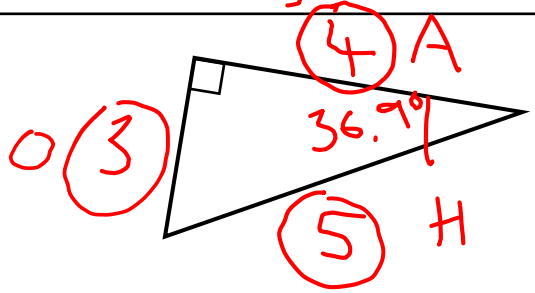
$\tan(67.4°) =$ 12/5



$\sin(26.0°) =$ 39/89

$\cos(26.0°) =$ 80/89

$\tan(26.0°) =$ 39/80

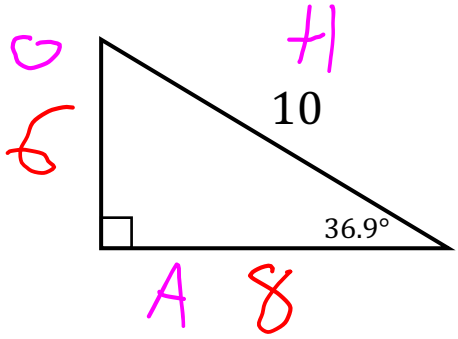


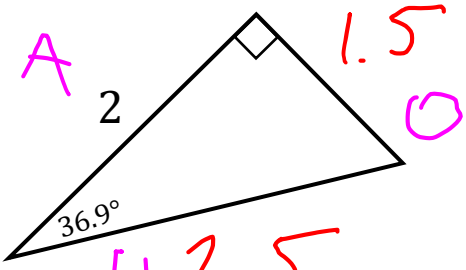
$\sin(36.9°) = \frac{3}{5}$

$\cos(36.9°) =$ 4/5

$\tan(36.9°) =$ 3/4

Task 3: Working backwards – Fully label each triangle.

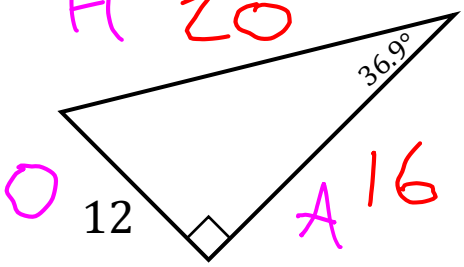


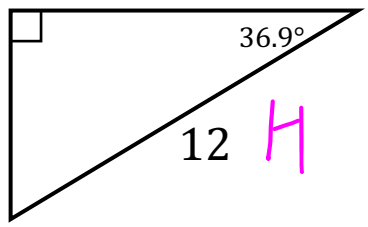


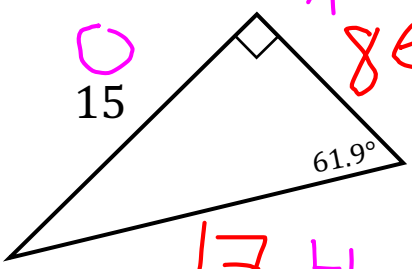
$\sin(36.9°) = \frac{3}{5}$

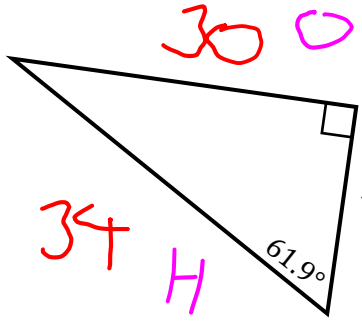
$\cos(36.9°) = \frac{4}{5}$

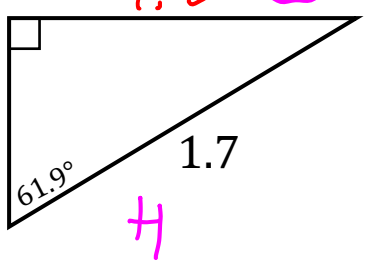
$\tan(36.9°) = \frac{3}{4}$







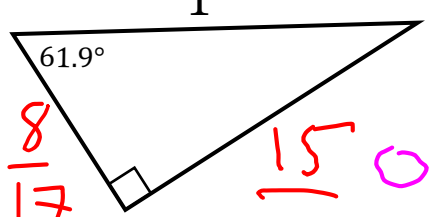


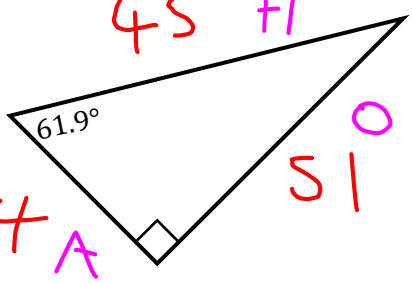


$\sin(61.9°) = \frac{15}{17}$

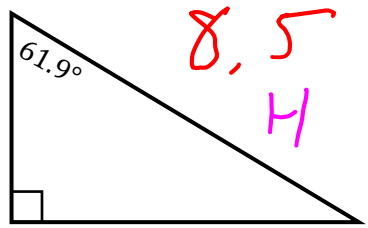
$\cos(61.9°) = \frac{8}{17}$

$\tan(61.9°) = \frac{15}{8}$



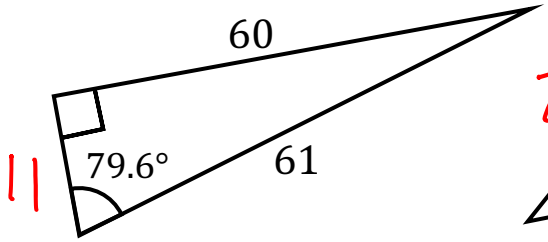


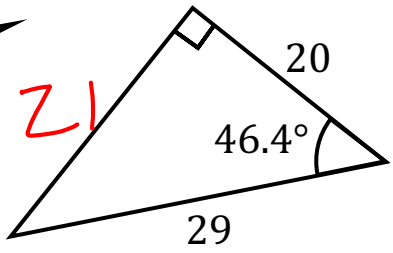
Perimeter = 120

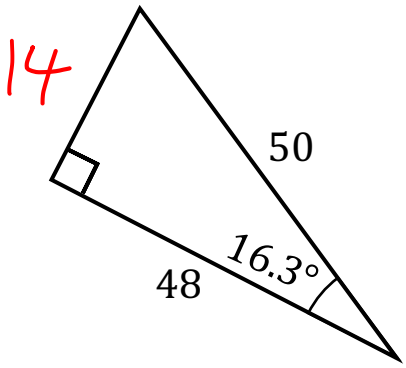


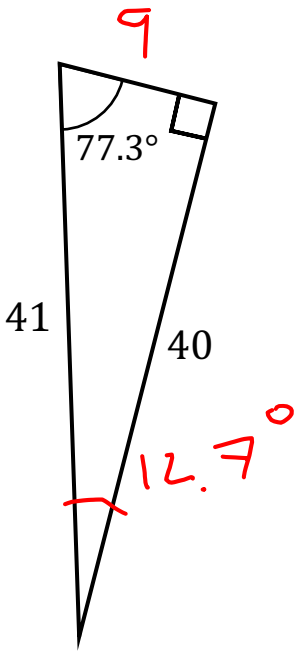
Area = 15

Task 4: Bringing it together 1 – Use the triangles to complete the table.









θ	$\sin(\theta)$	$\cos(\theta)$	$\tan(\theta)$
79.6°	60/61	11/61	60/61
46.4°	$\frac{21}{29}$	20/29	21/20
16.3°	$\frac{14}{50} = \frac{7}{25}$	$\frac{24}{25}$	$\frac{14}{48} = \frac{7}{24}$
77.3°	40/41	9/41	$\frac{40}{9}$
12.7°	9/41	40/41	$\frac{9}{40}$

Task 5: Bringing it together 2 – Use the table above to complete the triangles.