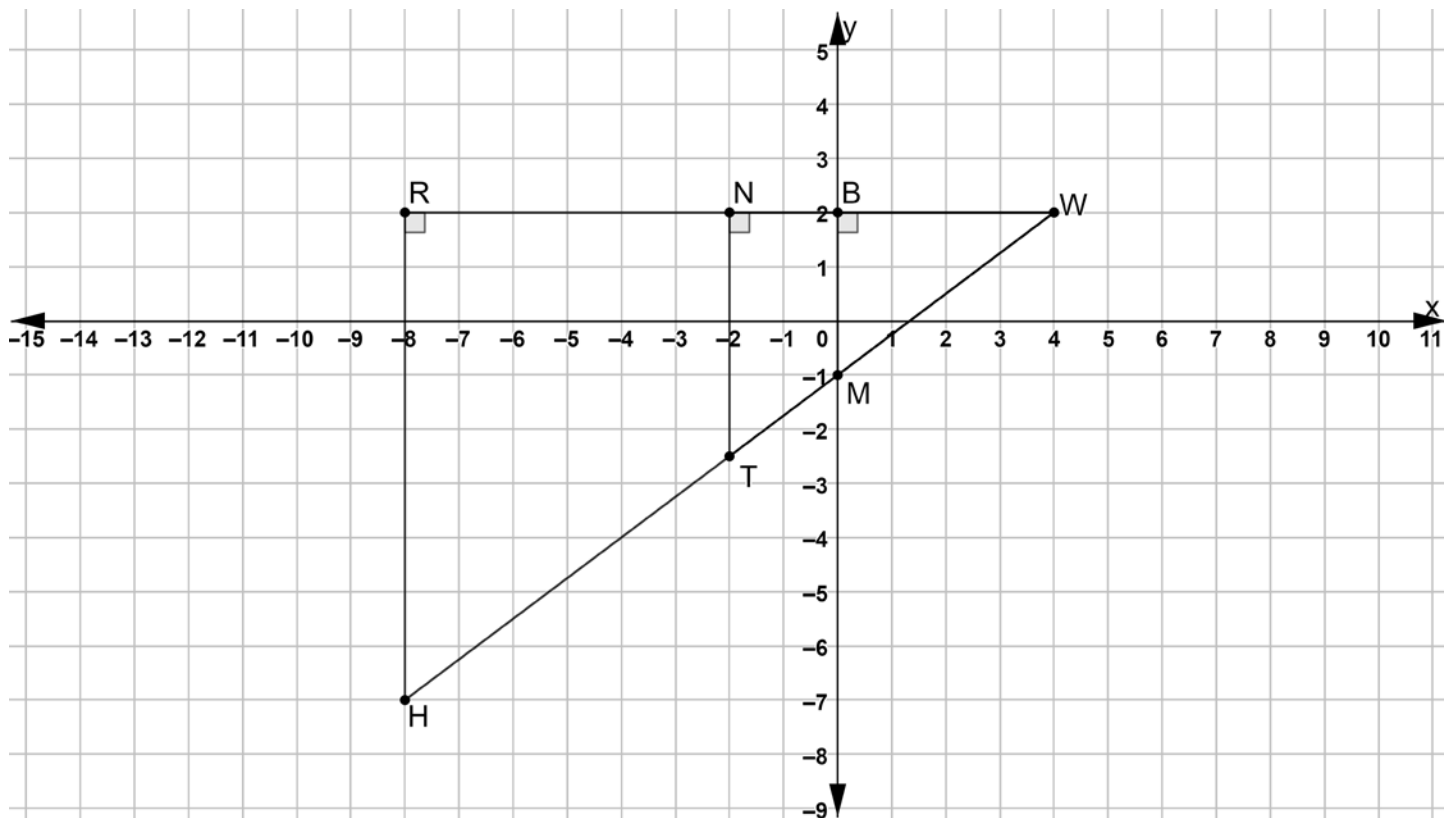


Three right triangles are shown on the coordinate grid.



The coordinates of the vertices are shown.

$R (-8, 2)$

$N (-2, 2)$

$B (0, 2)$

$W (4, 2)$

$H (-8, -7)$

$T (-2, -2.5)$

$M (0, -1)$

1. Explain why these triangles are similar.

Complete the table.

	Triangle	Side	Length
2.	<i>BWM</i>	\overline{BW}	
		\overline{BM}	
		\overline{MW}	
3.	<i>NWT</i>	\overline{NW}	
		\overline{TN}	
		\overline{TW}	
4.	<i>RWH</i>	\overline{RW}	
		\overline{RH}	
		\overline{HW}	

Using $\angle W$ as the reference angle, find the three ratios for each triangle. Write the values as a decimal rounded to the nearest thousandth.

	Triangle	Cosine	Sine	Tangent
5.	<i>BWM</i>			
6.	<i>NWT</i>			
7.	<i>RWH</i>			

Use your calculator to find each. Round to the nearest thousandth.

	Trigonometric Ratio	Value rounded to nearest thousandth
8.	$\cos(37^\circ)$	
9.	$\sin(37^\circ)$	
10.	$\tan(37^\circ)$	