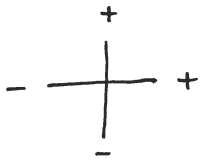
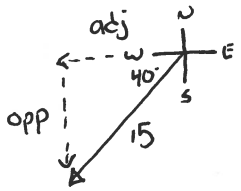
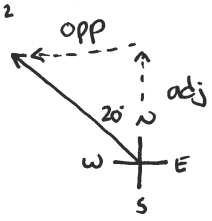
PHYSICS 20 - ADDING VECTORS WORKSHEET

(Q1) $\vec{d}_1 = 15\text{m}[40^\circ \text{ S of W}]$

$\vec{d}_2 = 10\text{m}[20^\circ \text{ W of N}]$

What is $\vec{d}_{TOT} = ?$



	x-comp	y-comp
$\vec{d}_1$ 	$d_{1x} =$	$d_{1y} =$
$\vec{d}_2$ 	$d_{2x} =$	$d_{2y} =$
$\vec{d}_{TOT}$	$d_{TOT_x} =$	$d_{TOT_y} =$

Reconstruct vector.

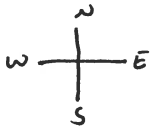
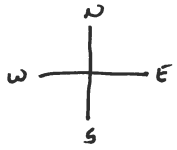
$a^2 + b^2 = c^2$

$\text{Tan}\,\theta = \frac{o}{a}$

$\vec{d}_{TOT} =$ _____ m [__° __ of __]

(Q2) $\vec{d}_1 = 20\text{m}\ [26^\circ\ N \text{ of } E]$

$\vec{d}_2 = 35\text{m}\ [80^\circ\ N \text{ of } W]$

	x-comp	y-comp
$\vec{d}_1$ 	$d_{1x} =$	$d_{1y} =$
$\vec{d}_2$ 	$d_{2x} =$	$d_{2y} =$
	$d_{TOTx} =$	$d_{TOTy} =$

$\vec{d}_{TOT} =$ _____ m [___° ___ of ___]

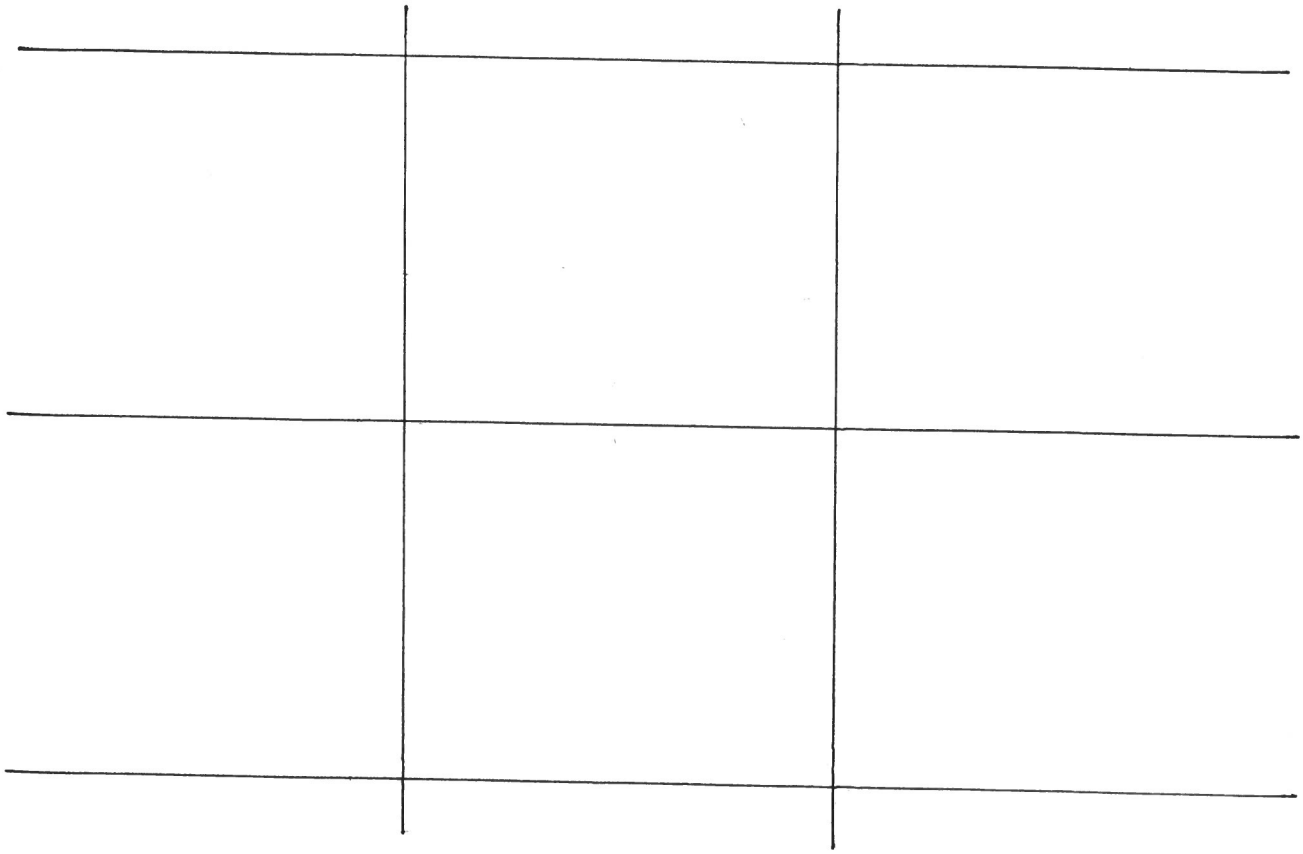
(Q3) $\vec{d}_1 = 100\,m\ [30^\circ W \text{ of } S]$

$\vec{d}_2 = 80\,m\ [10^\circ N \text{ of } W]$

	x-comp	y-comp
$\vec{d}_1$		
$\vec{d}_2$		
$\vec{d}_{TOT}$		

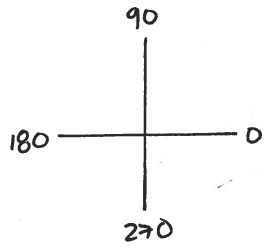
(Q4) $\vec{d}_1 = 30\,m\ [28°\ W\ of\ N]$

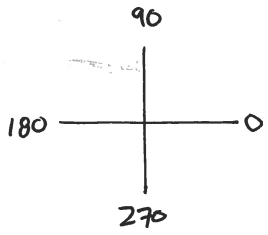
$\vec{d}_2 = 100\,m\ [N]$



(Q5) $\vec{d}_1 = 26\,m\ [130°]$

$\vec{d}_2 = 30\,m\ [212°]$





	x-comp	y-comp

$\vec{d}_{TOT} = \_\_\_\_\,m\ [\_\_\_°]$

(Q6) $\vec{d}_1 = 200\ m\ [156°]$

$\vec{d}_2 = 160\ m\ [12°\ N\ of\ W]$

NAVIGATION $\vec{d}_{TOT} = \_\_\_\_\ m\ [\_\_\_\_°\ \_\_\_\_\ of\ \_\_\_\_]$

POLAR $\vec{d}_{TOT} = \_\_\_\_\ m\ [\_\_\_\_°]$