1. (a) For the following series of displacements, choose an appropriate scale to draw the vectors in the space provided (use a ruler and protractor).
The first displacements start at the " $x$ " on the page. Accuracy is a key element of this task; vectors = clear arrows.

D1 $=5 \mathrm{~m}[\mathrm{E}]$
$\mathrm{D} 2=2 \mathrm{~m}[\mathrm{~N}]$
D3 $=8 \mathrm{~m}[\mathrm{SE}]$
Scale: $\qquad$
Determine the magnitude and direction of the resultant using a ruler and protractor. List it below.
(b) Determine the resultant using algebra techniques and the table below.

| Displacement | X comp | Y comp |
| :---: | :--- | :--- |
| D1 |  |  |
| D2 |  |  |
| D3 |  |  |
| Totals |  |  |

2. (a) For the following series of displacements, choose an appropriate scale to draw the vectors in the space provided (use a ruler and protractor). The first displacements start at the " $x$ " on the page. Accuracy is a key element of this task. vectors = clear arrows.
$\mathrm{D} 1=12 \mathrm{~km}\left[\mathrm{~W} 10^{\circ} \mathrm{S}\right]$
D2 $=10 \mathrm{~km}\left[@ 300^{\circ}\right]$
$\mathrm{D} 3=14 \mathrm{~km}\left[\mathrm{~S} 40^{\circ} \mathrm{E}\right]$
Scale: $\qquad$
Determine the magnitude and direction of the resultant using a ruler and protractor. List it below.

(b) Determine the resultant using algebra techniques and the table below.

| Displacement | X comp | Y comp |
| :---: | :--- | :--- |
| D1 |  |  |
| D2 |  |  |
| D3 |  |  |
| Totals |  |  |

