

Name: _

WORKSHEET

Representing vectors

- 1 Use a ruler and protractor to represent the following displacements on the same set of axes.
 - **a** 1 cm east
 - **b** 4 cm south
 - **c** 3 cm west
 - **d** 2 cm north
 - **e** 5 cm north-west
 - **f** 5 cm south-east
 - g 3.5 cm north-east
 - h 2.5 cm south-west
- 2 Use a ruler and protractor to represent the following displacements on the same set of axes.
 - **a** 3 cm east
 - **b** 7 cm NW
 - **c** 1 cm SE
 - **d** 5.5 cm SSW
 - **e** 3.5 cm ENE
 - f 4 cm WNW
 - g 5 cm NNE
 - **h** 4.5 cm SSE
 - i 2.5 cm WSW
 - j 4 cm NE
 - **k** 4.5 cm ESE
 - I 3.5 cm SW
 - **m** 5 cm NNW
 - n 3.5 cm west

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- **3** Draw the following distances and bearings as position vectors on the same set of axes.
 - **a** $8 \text{ km N0}^{\circ}\text{W}$
 - **b** $10 \text{ km N} 10^{\circ}\text{E}$
 - **c** 6 km N90°W
 - $\textbf{d} \hspace{0.1 in} 4 \hspace{0.1 in} km \hspace{0.1 in} N65^{\circ}W$
 - e 7 km $S75^{\circ}W$
 - **f** 5.6 km S53°E
 - **g** 9.4 km N81°E
 - $\textbf{h} \quad 10.4 \text{ km S7}^\circ W$
 - i 6.8 km S15°E
 - **j** 4.6 km S38°W
 - **k** 8.2 km N35°E
 - I 7.2 km S87°E
 - $\textbf{m}~3.8~km~N17^\circ W$
 - **n** 2.8 km S59°W
 - o $9.4 \text{ km N80}^{\circ}\text{W}$
 - **p** 9.2 km N61°E



Answers

1 1 unit : 1 cm



2 1 unit : 1 cm



3 1 unit : 2 km

