

Answer **all** the questions in the spaces provided.

- 1 (a)** A list of quantities that are either scalars or vectors is shown in Fig. 1.1.

quantity	scalar	vector
distance	✓	
energy		
momentum		
power		
time		
weight		

**Fig. 1.1**

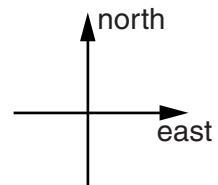
Complete Fig. 1.1 to indicate whether each quantity is a scalar or a vector.

One line has been completed as an example.

[2]

- (b)** A girl runs 120 m due north in 15 s. She then runs 80 m due east in 12 s.

- (i)** Sketch a vector diagram to show the path taken by the girl. Draw and label her resultant displacement R.



[1]