## Pathway to Health Science

Vectors - Practice tasks

1. Two vectors of the same magnitude are added; one pointing east, one west. The magnitude of the resultant vector is:

A 0
B $\quad 1$
C 2
D 3
2. Which of the following is not a vector quantity?

A velocity
B Force
C time
D acceleration
3. A boat moves 10 km due west, 5 km due north, and then 10 km due east. The displacement of the boat from its initial position is:

A 5 km , North
B $\quad 10 \mathrm{~km}$, East
C $\quad 5 \mathrm{~km}$, South
D $0 \mathbf{k m}$
4. You walk 31 m south and 31 m west. Your displacement is approximately:

A $\quad 22 \mathrm{~m}$ South west
B $\quad 44 \mathrm{~m}$ South west
C $\quad 44 \mathrm{M}$ North west
D $\quad 62 \mathrm{~m}$ South west
5. Two football players hit a blocking sled. One hits it with a force of 350 N , East, and the other hits it with a force of $\mathbf{2 7 0} \mathbf{N}$, South. The resulting force is:

A $\mathbf{4 4 2} \mathbf{N}$, in approximately a south-easterly direction
B $\quad 620$ N, South-East
C $\quad 80 \mathrm{~N}$, South-East
D 442 N, South-East
6. A vector has both magnitude and $\qquad$ .
A mass
B time
C direction
D none of the above
7. Graphical representation of vectors involves $\qquad$ .

A drawing arrows
B units of measure
C direction but not magnitude
D none of the above

## Answers:

1. A
2. C
3. A
4. C
5. A
6. C
7. A and B
