Q1. **a** = $\begin{pmatrix} 5 \\ -2 \end{pmatrix}$ and **b** = $\begin{pmatrix} -2 \\ 3 \end{pmatrix}$

Circle the vector **a** – **b**

$\begin{pmatrix} -3 \\ -5 \end{pmatrix}$ $\begin{pmatrix} 7 \\ 1 \end{pmatrix}$ $\begin{pmatrix} 3 \\ 1 \end{pmatrix}$ $\begin{pmatrix} 7 \\ -5 \end{pmatrix}$

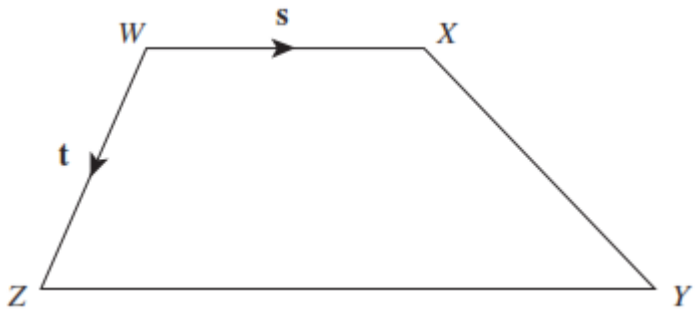
(Total 1 mark)

Q2. $WXYZ$ is a trapezium.

$\overrightarrow{WX}$ = **s**

$\overrightarrow{WZ}$ = **t**

$ZY : WX = 3 : 2$



(a) Write vector $\overrightarrow{ZY}$ in terms of **s**

.....

Answer .....

(1)

(b) Work out vector $\overrightarrow{XY}$ in terms of **s** and **t**
Give your answer in its simplest form.

.....

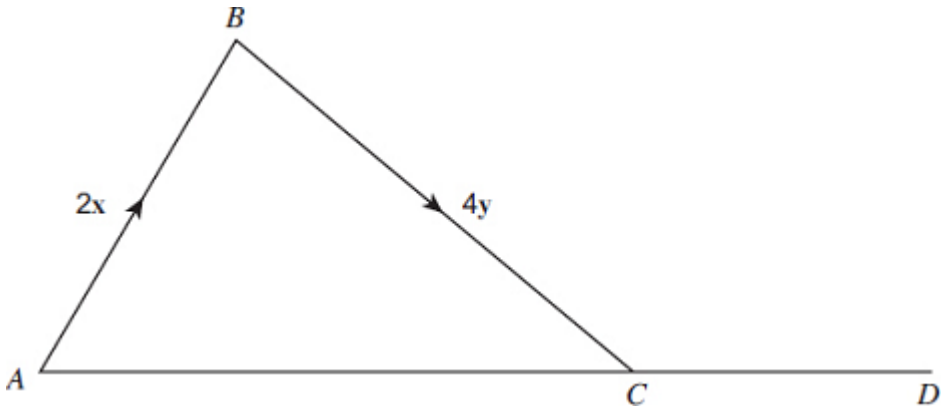
.....

.....

Answer .....

(2)
(Total 3 marks)

Q3. $\overrightarrow{AB}$ = 2x and $\overrightarrow{BC}$ = 4y
ACD is a straight line.



(a) Write down the vector $\overrightarrow{AC}$ in terms of x and y.

Answer .....

(1)

(b) *AC* : *CD* = 2 : 1

Work out the vector $\overrightarrow{AD}$ in terms of x and y,.
Give your answer as simply as possible.

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Answer .....

(2)
(Total 3 marks)