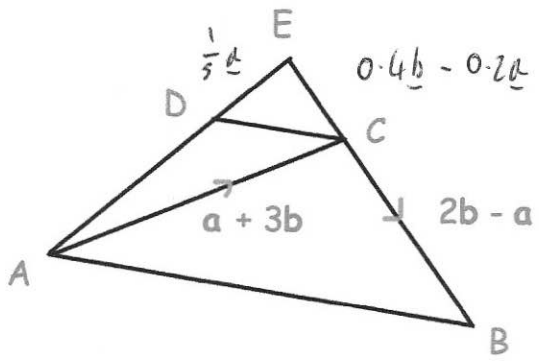
Name: _____ 5-a-day Higher Plus

15th August

Corbettmaths



$\overrightarrow{EC} = \frac{1}{5}\overrightarrow{CB}$

$\overrightarrow{DE} = \frac{1}{5}a$

Find the vector $\overrightarrow{AB}$

$5b$

$\overrightarrow{DC} = \overrightarrow{DE} + \overrightarrow{EC}$

$= 0.2a + 0.4b - 0.2a$

$= \frac{2}{5}b$

Prove DC is parallel to AB

$\overrightarrow{AB} = 12.5\overrightarrow{DC}$

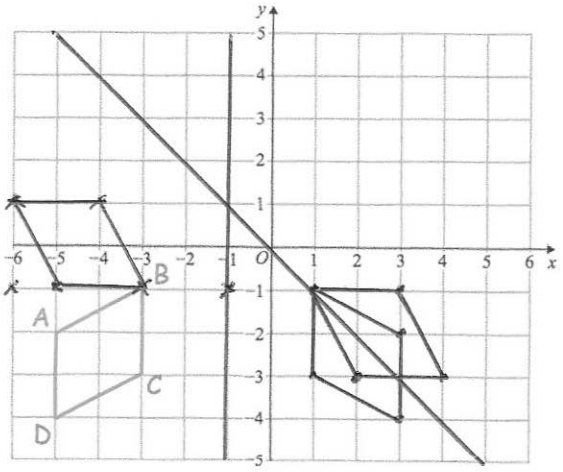
$\therefore$ $\overrightarrow{AB}$ & $\overrightarrow{DC}$ are parallel.

Here is quadrilateral ABCD

ABCD is reflected in the line $x = -1$
followed by a reflection in the line
$y = -x$
followed by a rotation of 180° about
$(-1, -1)$

Which of the vertices are invariant?

B



A = {2, 3, 4, 5, 7}

B = {2, 3, 5, 9}

Find P(A' ∪ B')

$\frac{1}{2}$