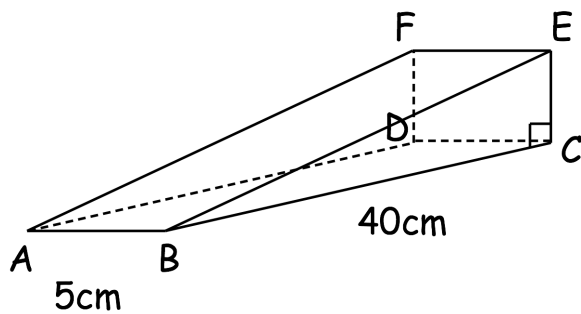


$$\vec{AB} = \begin{pmatrix} 4 \\ -1 \end{pmatrix}$$

Write down a vector that is perpendicular to AB and three times the length.

A triangular prism is shown below.



Angle CBE = 8°

Calculate the length of BE

Calculate the length of BF

A bag contains 15 sweets.
 9 sweets are red.
 4 sweets are yellow.
 2 sweets are green.
 Two sweets are taken from the bag without replacement.

Work out the probability that the two sweets are same colour.

Solve the simultaneous equations

$$x - 7 = 2y$$

$$x^2 + 4y^2 = 37$$