

5th November



Corbettmaths

The ratio of copper to zinc in the alloy brass is 3:2

Copper costs \$4830 per tonne  
Zinc costs \$1846 per tonne

Work out the cost of 500kg of brass.

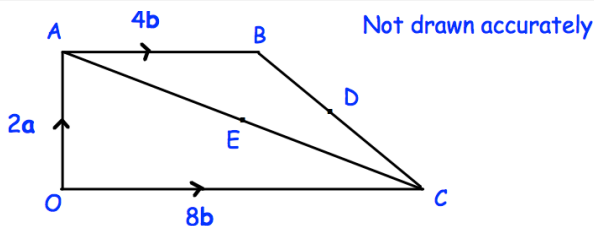
The population of birds on an island in 2016 was 22% lower than it was in 1996.

In 2016 the population of birds was 76440.

How many birds lived on the island in 1996?

A container exerts a force of 1200 Newtons on the floor.  
The pressure on the floor is 40 Newtons/m<sup>2</sup>

Calculate the area of the container that is in contact with the floor.



$\vec{OA} = 2\mathbf{a}$     $\vec{AB} = 4\mathbf{b}$    and    $\vec{OC} = 8\mathbf{b}$

Point D is the midpoint of BC.  
Point E is the midpoint of AC.

Write these vectors in terms of **a** and **b**.

$\vec{OB}$

$\vec{AC}$