



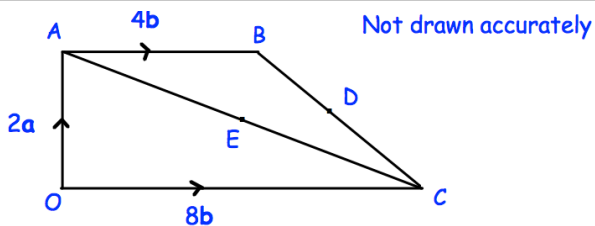
Zayn is checking the quality of pencils made by a machine.  
 7 out of the 118 pencils that he checked were faulty.  
 The machine made 6000 pencils.  
 Use this information to estimate how many of the 6000 pencils were faulty.

Simplify

$$\frac{2x^2 + 5x - 3}{x^2 - 9}$$

A bag contains 10 counters.  
 4 of the counters are red  
 4 of the counters are purple  
 2 of the counters are white  
 Sharon chooses a counter at random, records the colour, then replaces it.  
 Sharon then chooses a second counter at random and records the colour.

What is the probability that both counters are the same colour?



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

Write down a vector for  $\vec{AC}$

Write down a vector for  $\vec{OB}$

Write down a vector for  $\vec{AE}$