Three students are selected at random. Find the probability that all three are female.

Two positive integers have a difference of 4. Prove the difference between the squares of the integers is four times the sum of the integers.

Write 1.245454545… as a fraction

Shown is a straight line joining O and A. The length of the line is $\sqrt{1805}$ The gradient of the line is $\frac{1}{2}$ Find the coordinates of A.

The ratio of A to B is 1:400 where 400 is given to the nearest 100. B is $5 \times 10^{15}$ correct to one significant figure

Calculate the minimum value of A Give your answer in standard form.