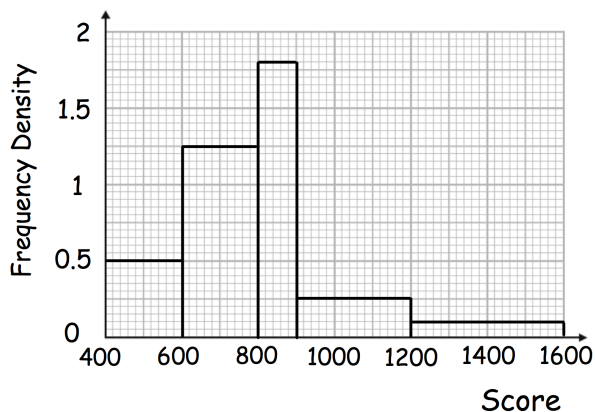




Write $1.245454545\dots$ as a fraction

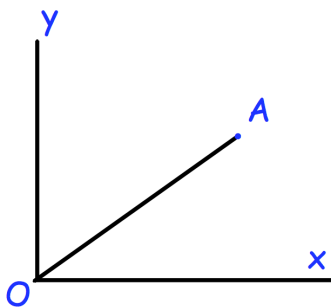
Two positive integers have a difference of 4.
Prove the difference between the squares of the integers is four times the sum of the integers.

The histogram shows information about the scores 645 players obtained in a game.



Estimate the number of players who scored under 700 points.

20% of players scored over Y points.
Work out an estimate for Y.



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.