2nd January **Higher 5-a-day**

Corbettmaths

x : y = 5 : 3 and y : z = 7 : 10

Find x : z

$\sqrt{8^2 + 15^2 + 144^2} = \sqrt{8^2 + 15^2} + \sqrt{w^2}$

w is a positive integer.

Find w.

Oscar is playing cricket.
When attempting to catch the ball, the probability Oscar is successful is $\frac{7}{10}$

During the game, Oscar attempts two catches.

Find the probability that Oscar is successful with both catches.

Simplify $\frac{x^2 + 5x + 4}{x^2 + 4x + 3}$

Find where the line 7y = 3x + 10 meets the x-axis.