Name: _____ 5-a-day Higher Plus

31st May

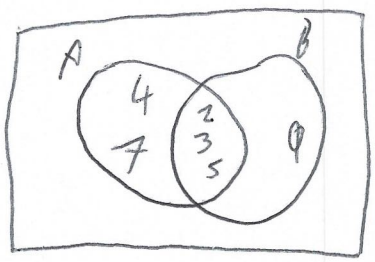
Corbettmaths

A = {2, 3, 4, 5, 7}

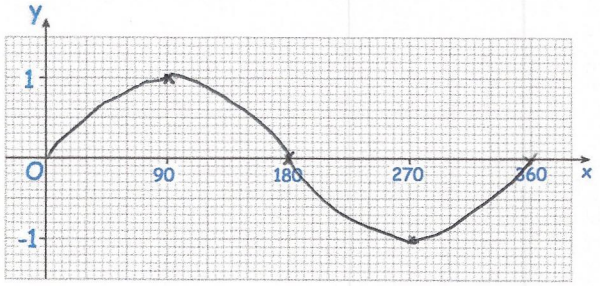
B = {2, 3, 5, 9}

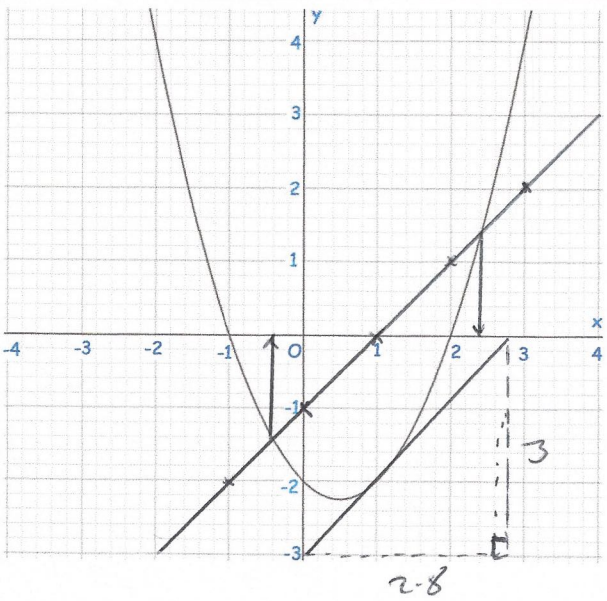
Find the probability of A given B

$\frac{3}{4}$



Sketch the graph of $y = \sin x$ for $0 \leq x \leq 360$.





Shown is $y = x^2 - x - 2$

By drawing an appropriate straight line, use your graph to find estimates for the solutions of $x^2 - 2x - 1 = 0$

$y = x^2 - x - 2$

$0 = x^2 - 2x - 1$

$y = x - 1$

$x = -0.4$

$x = 2.4$

Calculate an estimate for the gradient of the graph $y = x^2 - x - 2$ at the point where $x = 1$

$\frac{3}{2.8} = 1.0714$

E E O E O E E O O

2	2	3	4	5	6	6	7	9

Rebecca has 9 cards, each with a number on it. She picks three cards at random, without replacement.
Rebecca adds the three numbers to get a score.

E + E + E = E ×

E + O + E = O ✓

E + E + O = O ✓

O + E + E = O ✓

O + O + E = E ×

O + E + O = E ×

E + O + O = E ×

O + O + O = O ✓

Calculate the probability that the score is an odd number

$P(EEO) = \frac{5}{9} \times \frac{4}{8} \times \frac{4}{7} = \frac{10}{63}$

$P(OOO) = \frac{4}{9} \times \frac{3}{8} \times \frac{2}{7} = \frac{1}{21}$

$\frac{10}{63} + \frac{10}{63} + \frac{10}{63} + \frac{1}{21} = \frac{11}{21}$