Name: _____ 5-a-day Higher Plus

1st August

Corbettmaths

Write down the exact value of *sin 30°*

$\frac{1}{2}$

There are x apples in a crate.
2 of the apples are bad.

Jesse chooses two apples from the crate, without replacement.
The probability that he selects two bad apples is $\frac{1}{28}$

$P(BB) = \frac{2}{x} \times \frac{1}{x-1}$

$\frac{2}{x^2-x} = \frac{1}{28}$

Prove $x^2 - x - 56 = 0$

$56 = x^2 - x$

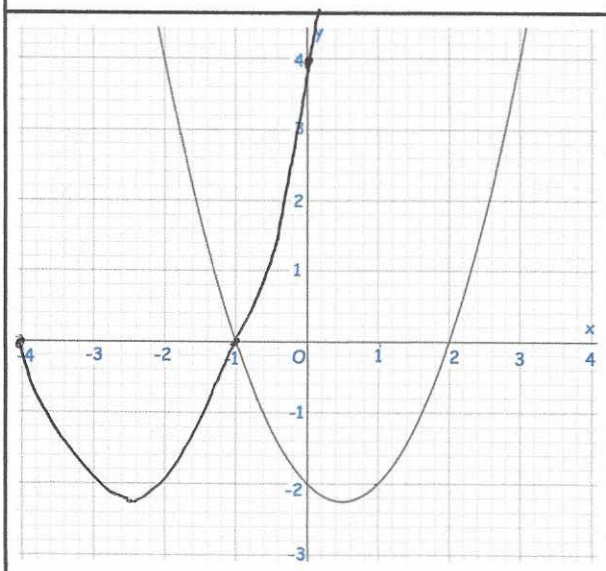
$x^2 - x - 56 = 0$

$(x-8)(x+7) = 0$

$x = 8 \quad x = -7$

Find x, the number of apples in the crate

$x = 8$



Shown is y = f(x)

Find ff(1)

$f(1) = -2$

$f(-2) = 4$

$ff(1) = 4$

Sketch y = f (x + 3)

3 left