

**30th March**

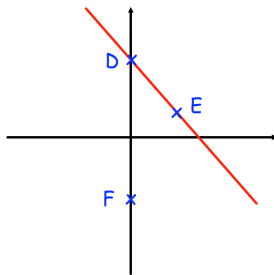
Corbettmaths

Find an expression, in terms of  $n$ ,  
for the  $n$ th term of the quadratic  
sequence

11   12   15   20

Solve  $x^2 - 4x - 21 > 0$

Prove  $3n(3n + 4) + (n - 6)^2$  is  
positive for all values of  $x$



A straight line passes through  
 $D(0, 10)$  and  $E(5, 1)$

Find the equation of the line  
perpendicular to  $DE$  and passing  
through  $F(0, -6)$

Find the shortest distance between  
the line passing through  $DE$  and the  
point  $F$