## 19th September

Solve the simultaneous equations

$$2x - y = 7$$
$$xy = 15$$

Here are the first 5 terms of a quadratic sequence

9

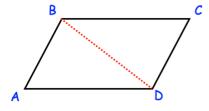
17 29 45

65

Find an expression, in terms of n, for the nth term of this quadratic sequence.

Solve to one decimal place

$$\frac{x-4}{x+5} - \frac{3x-2}{x+1} = 1$$



ABCD is a parallelogram. Prove that triangles ABD and BCD are congruent.

Show

$$\frac{1}{1+\frac{1}{\sqrt{6}}}$$

can be written as

$$\frac{1}{5}\left(6-\sqrt{6}\right)$$