



- ① (a) Find the value of m in the following equation: $\frac{(13^{-5})^7}{13^m} = 13^{-30}$

Show your working clearly.

- (b) Find the value of y in the following equation: $\sqrt{3} \times 27 = 3^y$

© www.formular1maths.com

Link to Solutions: <https://youtu.be/enDzIQhKzfQ>

Show your working clearly.

Calculations and Answer

Green Pen Corrections and Notes

(4)

- ② Given that $(7 + \sqrt{n})(11 - \sqrt{n}) = 60 + m^2\sqrt{n}$, where n is a prime number and m , a positive constant.

Find the values of m and n .

Show clearly all stages of your working.

© www.formular1maths.com

Link to Solutions: <https://youtu.be/enDzIQhKzfQ>

Green Pen Corrections and Notes

Calculations and Answer

(3)

- ③ The sum of the first N terms of a series S is 630.

The 3rd term is 10 and the 5th term is 15. Find the value of N .

Show clear algebraic working

© www.formular1maths.com

Link to Solutions: <https://youtu.be/enDzIQhKzfQ>

Calculations and Answer

Green Pen Corrections and Notes

(5)