## **Higher Maths question bank :: Paper 1**

## 18. More logs

1. Solve 
$$\log_4(x+5) + \log_4(x-7) = 3$$
 for  $x > 0$ .

2. Solve 
$$\log_3(x-8) + \log_3 x = 2$$
 for  $x > 0$ .

3. Solve 
$$\log_6(x-3) + \log_6(x+6) = 2$$
 for  $x > 0$ .

4. Solve 
$$\log_9(x-6) + \log_9 x = \frac{3}{2}$$
 for  $x > 0$ .

5. Solve 
$$\log_4(x - 30) = 3 - \log_4 x$$
 for  $x > 0$ .