1. Integers

1. The sum of two numbers exceeds their product by one. Their difference is equal to their product less five. Find the two numbers. (3mks)

2. $3x - 1 > -4$
   $2x + 1 \leq 7$

3. Find the value of x
   $2^{(x-3)} \times 8^{(x+2)} = 128$

4. Evaluate $\dfrac{-12 \div (-3) \times 4 - (-15)}{-5 \times 6 \div 2 + (-5)}$

5. Without using a calculator/mathematical tables, evaluate leaving your answer as a simple fraction

   $$\frac{(-4)(-2) + (-12) \div (+3)}{-9 - (15)} + \frac{-20 + (+4) + -6)}{46 - (8+2) - 3}$$

6. Given that $\mathbf{P} = \begin{pmatrix} -2 & 3 \\ -1 & 4 \end{pmatrix}$ and $\mathbf{R} = \begin{pmatrix} 1 & 3 \\ 0 & 2 \end{pmatrix}$ and if $\mathbf{Z} = \mathbf{P}^{-1}\mathbf{R}$. Find $\mathbf{Z}$

7. Evaluate $\dfrac{-8 \div 2 + 12 \times 9 - 4 \times 6}{56 \div 7 \times 2}$