

F Summer Consolidation 2

- 31 GBP is worth the same as 37 USD.
 - How many USD does 2300 GBP buy?
 - How many GBP does 100,000 USD buy?
- A pentagon has internal angles of 90° , 90° , $3x^\circ$, $3x^\circ$ and $2x^\circ$. Find the value of x .
- A triangle ABC has a right angle at B . If $AB = 6$ and $BC = 7$, find angle BAC .
- A triangle ABC has a right angle at B . If $AB = 3$ and $ACB = 70^\circ$, find AC .
- Solve the following equations:
 - $\frac{x+1}{3} - \frac{x-1}{2} = x + \frac{x-2}{6}$.
 - $-x^2 = 9x$.
 - $x^2 = 9$
 - $(x+1)(x+2) = (x-1)(x-4)$.
 - $(x+3)(x+1) = 8$.
 - $2x^2 + 6x = 20$.
 - $4x^2 + x = 5$.
- Find the equation of the line that passes through $(2, 1)$ and $(3, \frac{1}{2})$ in the form $y = mx + c$.
- The gradient between the points $(2, p)$ and $(4, 3)$ is $\frac{1}{3}$. Find the value of p .
- Find the mid-point of the points $(-1, 3)$ and $(3, 4)$.
- Find the 100th term of the following sequences:
 - 13, 17, 21, 25, 29, ...
 - 5, 11, 19, 41, 55, ...
- A t-shirt is in a sale after a 20% price reduction. Its sale price is £18.40. What was its original price?
- £2500 is invested in a compound interest bank account at 4% for 15 years. How much is in the account after this time?
- Find $(3 \times 10^{877}) \times (6 \times 10^{878})$. Giving your answer in standard form.
- Find $(3 \times 10^{877}) \div (6 \times 10^{878})$. Giving your answer in standard form.
- Find $(3 \times 10^{877}) + (6 \times 10^{878})$. Giving your answer in standard form.
- Expand $(2x + 5)^2$.
- Expand $(x - 3)^3$.