1) Express 603000 in standard form
2) Expand $4 x^{2}(2 x-3)$
3) Work out $3.8^{2}$
4) Round 38492 correct to 2 significant figures
5) What is the gradient of $y=-2 x+3$

6) Round 6.148 km to the nearest 10 m
7) Sales rise from 800 per week to 920 per week. Calculate the percentage change
8) If 7 pens cost $£ 3.15$, how much would 10 pens cost?
9) Solve the equation $7 x+6=3 x-2$
10) What is the exact value of $\cos 45^{\circ}$ ?

1）Express 0.000307 in standard form

2）Expand and simplify $(x+7)(x+3)$

3）Factorise $42 \mathrm{x}-24$

4）Work out $3900 \div 12$

5）Increase $£ 360$ by $15 \%$

1) A mass is stated as 70 g correct to the nearest 10 g . What is the lower bound?
2) Find the next two terms in the sequence $8,4,2,1, \ldots$
3) Find the $y$-intercept of the line $2 y=4 x+6$

4) Solve simultaneously

$$
\begin{gathered}
x+y=5 \\
2 x+4 y=14
\end{gathered}
$$

5) Work out $\frac{4}{5}-\frac{3}{4}$
6) Simplify $\mathrm{x}^{8} \div \mathrm{x}^{2}$
7) Expand and simplify $(x-7)(x-3)$
8) Factorise $x^{2}+5 x-24$
9) Solve simultaneously
$5 \mathrm{x}-\mathrm{y}=17$ and $2 \mathrm{x}+\mathrm{y}=11$
10) If it takes 6 hours for 2 workers to paint a fence, how long would it take 3 workers?
11) A measure is given as 65 m to the nearest 5 m . What is the upper bound?
12) Work out $\frac{3}{4} \div \frac{2}{7}$ giving your answer as a mixed number
13) Round 0.030487 to 2 significant figures
14) Does the point $(2,6)$ lie on the line $y=5 x-4$ ?
15) State the exact value of $\cos 45^{\circ}$
16) Work out $3.6 \times 10^{3}-2.8 \times 10^{2}$
17) Expand and simplify $(x+3)(x-5)$
18) Factorise $\mathrm{x}^{2}-8 \mathrm{x}+12$
19) An antique is sold for $£ 360$ making a profit of $20 \%$. What was the original price of the antique?
20) Work out $\frac{7}{8}+\frac{5}{12}$ giving your answer as a mixed number
21) Express as an inequality, the error interval when $t$ is given as 60 to one significant figure.
22) Solve $2 x^{2}+3 x=0$
23) The price of an item increased from $£ 24$ to $£ 30$. Calculate the percentage change.
24) A car travels 48 km in 1 hour 20 minutes.

Calculate the average speed.
5) Sketch the graph of $y=x^{2}+1$


1) Work out $3.6 \times 10^{2} \times 2 \times 10^{3}$
2) Factorise $x^{2}-x-12$
3) Find the gradient of the line through $(2,7)$ and $(4,13)$
4) Round 0.30496 correct to 2 decimal places
5) Work out $24 \div 0.5$
6) Express as an inequality, the error interval when $x$ is given as 120 to 2 significant figures
7) Solve simultaneously $2 x+y=0$ and $3 x+2 y=3$
8) Find the $30^{\text {th }}$ term of the sequence $-3,3,9,15, \ldots$
9) A block of density of $20 \mathrm{~g} / \mathrm{cm}^{3}$ has a mass of 10 g . Calculate its volume
10) Work out $1 \frac{2}{3} \times 2 \frac{3}{4}$
11) Work out $\left(6 \times 10^{6}\right) \div\left(3 \times 10^{2}\right)$
12) Factorise $x^{2}-16$
13) Find the equation of the straight line passing through the points $(0,3)$ and $(2,9)$
14) If it takes 3 workers 6 hours to complete a task, how many hours would it take 4 workers?
15) Work out $0.8 \div 0.02$

FAA6.2

1) Factorise $x^{2}-9 x+18$
2) Truncate 23.085 correct to 1 decimal place
3) Work out $2 \frac{1}{3} \div \frac{3}{5}$
4) State the exact value of $\sin 30^{\circ}$
5) Solve simultaneously $2 x+y=5$ and $3 x-2 y=18$
