1) Work out $\frac{3}{4} \div \frac{1}{6}$
2) Work out $1.2 \times 2.89$
3) Evaluate $3^{0}$
4) Expand 4a(3-2a)
5) Complete $12 \mathrm{~km} / \mathrm{h}=$ ? $\mathrm{m} / \mathrm{s}$
6) Find $35 \%$ of $£ 460$
7) Solve $5 x+6=3 x-1$
8) Make $x$ the subject of $y=x^{2}-b$
9) Find the nth term: $17,23,29,35, \ldots$
10) Work out $6 \times 3-(4+7)$
11) Expand and simplify $(x-3)(x+2)$
12) Work out $36.3 \times 10^{3}$
13) Distance $=8 \mathrm{~km}$, Time $=10$ minutes,

Speed $=$ ? km/h
4) Work out $2 \frac{1}{4} \times \frac{2}{3}$
5) Express 130 as a product of prime factors

1) Solve $\frac{9 x+3}{2}=5 x-4$
2) List the first 4 terms of a geometric sequence with a first term of 2 and a common ratio of 3
3) Divide $£ 35$ in the ratio $3: 2$
4) Decrease $£ 3400$ by $20 \%$
5) $\quad$ Simplify $\left(2 x^{2} y\right)^{3}$
93.1
6) $3(4 a+b)-2(a+3 b)$
7) Work out $2 \frac{1}{2} \div 1 \frac{2}{3}$
8) Work out $10+5 \times 4 \div 2$
9) Factorise fully $24 x^{3}-8 x$
10) Express 314000000 in standard form
11) What is the next term of this sequence:

$$
3,12,48,192, \text { ? }
$$

2) Work out $78 \div 0.3$
3) Make $x$ the subject of $y=\frac{x^{2}}{a}$
4) Expand and simplify $(x+10)(x-3)$
5) $\operatorname{Simplify} \frac{2 x}{3}+\frac{5 x}{4}$
6) Simplify $\frac{15 x^{3} y^{4}}{3 x^{2} y}$
7) Factorise $x^{2}-25$
8) If $x=-3$, find the value of $2 x^{2}+x+3$
9) If the $\mathrm{n}^{\text {th }}$ term of a sequence is $3 \times 2^{n-1}$, find the $4^{\text {th }}$ term
10) Estimate, by rounding each number to 1 significant figure: $0.531^{2} \times 95.8$
11) Find the lowest common multiple of 42 and 60
12) Expand and simplify $(2 x-3)^{2}$
13) Express 0.00104 in standard form
14) A block has a mass of 30 g and a density of $5 \mathrm{~g} / \mathrm{cm}^{3}$.

Calculate its volume.
5) Make $x$ the subject of $y=(a+b) x^{2}$
95.1

1) Find the distance:

$$
\text { Speed }=40 \mathrm{~km} / \mathrm{h} \text { and time }=1 \text { hour } 30 \mathrm{mins}
$$

2) Factorise $x^{2}+9 x+20$
3) Expand and simplify $\left(x^{2}-3\right)(x+7)$
4) Express 0.002003 in standard form
5) Find the gradient of the line $2 y-6 x=3$

6) Make $x$ the subject of $y=(a x+b)^{2}$
7) Express $\frac{43}{40}$ as a percentage
8) Solve $\frac{x+3}{2}+\frac{x}{3}=11$
9) By rounding each number to 1 significant figure, estimate $\frac{58^{2} \times 3.89}{1.93}$
10) Find the first term: ?, $20,100,500,2500, \ldots$
96.1
11) Work out $3 \frac{1}{2} \div 1 \frac{2}{3}$
12) A price is reduced from $£ 500$ to $£ 340$. Calculate the percentage change.
13) Expand and simplify $(x+1)(x-2)(x+3)$
14) Expand and simplify $(4 x-3)^{2}$
15) What is the $50^{\text {th }}$ term of this sequence: $3,9,15,21, \ldots$ ?
96.2
16) $x$ is given as 60 to 1 significant figure.

Write an inequality to show the range of values that $x$ could take.
2) Factorise $2 x^{2}+7 x+6$
3) Work out $4 \times 10^{3} \times 7 \times 10^{2}$, giving the answer in standard form
4) Find the $y$-intercept of the line $2 y-3 x=10$

5) Solve $\frac{x}{3}+5=x+1$

