91.3

1) Work out $\frac{5}{6} \div \frac{1}{2}$
2) Work out $5.6 \times 0.97$
3) Evaluate $4^{3}$
4) Expand $3 x(5-2 x)$
5) Complete: $10 \mathrm{~m} / \mathrm{s}=$ ? $\mathrm{km} / \mathrm{hr}$
6) Find $25 \%$ of $£ 320$
7) Solve $2 x+5=6 x-1$
8) Make $x$ the subject of $a y=(x-b)^{2}$
9) Find the nth term: $7,18,29,40, \ldots$
10) Work out $10-2 \times 2+3$
11) Expand and simplify $(x-6)(x-2)$
12) Work out $3684.3 \times 10^{-2}$
13) Distance $=12 \mathrm{~km}$, Time $=15$ minutes,

Speed $=$ ? km/h
4) Work out $2 \frac{2}{5} \times 1 \frac{2}{3}$
5) Express 98 as a product of prime factors

1) Solve $\frac{4 x-5}{3}=2 x-7$
2) List the first 4 terms of a geometric sequence with a first term of 2 and a common ratio of 10
3) Divide $£ 60$ in the ratio $7: 5$
4) Increase $£ 2800$ by $20 \%$
5) $\quad$ Simplify $\left(3 x^{3} y\right)^{4}$
93.3
6) $2(3 a+5 b)-6(a-2 b)$
7) Work out $3 \frac{1}{2} \div 2 \frac{4}{5}$
8) Work out $13-2 \times 5+4$
9) Factorise fully $36 y^{2}-45 y$
10) Express 5010000 in standard form
11) What is the next term of this sequence: $4,12,36,108, \ldots$
12) Work out $7.24 \div 0.4$
13) Make $x$ the subject of $y=\frac{\sqrt{x}}{a}$
14) Expand and simplify $(x-6)(x-3)$
15) Simplify $\frac{4 x}{5}-\frac{x}{4}$
94.3
16) Simplify $\frac{\left(4 x^{2} y\right)^{2}}{2 x y}$
17) Factorise $4 x^{2}-9$
18) If $x=0.5$, find the value of $3 x^{2}-x+5$
19) If the $\mathrm{n}^{\text {th }}$ term of a sequence is $2 \times 3^{n-1}$, find the $4^{\text {th }}$ term
20) Estimate, by rounding each number to 1 significant figure:
$0.213^{2} \times 96.04$
21) Find the highest common factor of 42 and 60
22) Expand and simplify $(3 x-4)^{2}$
23) Express $2.03 \times 10^{-3}$ in ordinary form
24) A block has a volume of $30 \mathrm{~cm}^{3}$ and a density of $5 \mathrm{~g} / \mathrm{cm}^{3}$. Calculate its mass.
25) Make $x$ the subject of $y=a^{2} x-b$
95.3
26) Find the distance:

$$
\text { Speed }=48 \mathrm{~km} / \mathrm{h} \text { and time }=2 \text { hour } 15 \mathrm{mins}
$$

2) Factorise $x^{2}+3 x-4$
3) Expand and simplify $\left(x^{2}-2\right)(x-5)$
4) Express 20190 in standard form
5) Find the gradient of the line $2 y=6 x-2$

6) Make $x$ the subject of $y=a^{2} x+b^{2}$
7) Express $\frac{39}{150}$ as a percentage
8) Solve $\frac{2 x}{4}+\frac{x-3}{3}=11$
9) By rounding each number to 1 significant figure, estimate $\frac{82.3 \times 7.58}{0.176}$
10) Find the first term: ?, $0.375,0.75,1.5,3, \ldots$
96.3
11) Work out $2 \frac{3}{4} \times 1 \frac{2}{5}$
12) A price is increased from $£ 250$ to $£ 340$. Calculate the percentage change.
13) Expand and simplify $(x-2)(x-5)(x+1)$
14) Expand and simplify $(3 x-7)^{2}$
15) What is the $20^{\text {th }}$ term of this sequence: $10,17,24,31, \ldots$ ?
96.4
16) $x$ is given as 50 to 2 significant figures.

Write an inequality to show the range of values that $x$ could take.
2) Factorise $3 x^{2}+7 x-6$
3) Work out $3 \times 10^{-3} \times 6 \times 10^{-2}$, giving the answer in standard form
4) Find the $y$-intercept of the line $2 y=6 x+5$

5) Solve $\frac{x}{2}+5=3 x-10$

