1 Write each amount in the place-value table and then in the box.
a)

b)



| Th | H | T | U |
| :---: | :---: | :---: | :---: |
| 7 | 0 | 5 | 3 |


| 7 | 0 | 5 | 3 |
| :--- | :--- | :--- | :--- |

c)



| Th | H | T | U |
| :---: | :---: | :---: | :---: |
| 4 | 6 | 0 | 8 |


| 4 | 6 | 0 | 8 |
| :--- | :--- | :--- | :--- |

Write these numbers with words in your exercise book.
a) i) 5032 five thousand and thirty two
ii) 5302 five thousand, three hundred and two
iii) 2035 two thousand and thirty five
iv) 2350 two thousand, three hundred and fifty
b) i) 1604 one thousand, six hundred and four ii) 6401six thousand, four hundred and one $\begin{array}{ll}\text { iii) } 4016 \text { four thousand and sixteen } & \text { iv) } 4601 \text { four thousand, six hundred and one }\end{array}$

3 Show each number as the sum of thousands, hundreds, tens and units.

| Th | H | T | U |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 6 | 3 | 4 |  |  |  | 0 | 0 | 0 | + | 6 | 0 | 0 | + | 3 | 0 | + | 4 |
| 3 | 4 | 0 | 7 |  |  |  | 0 | 0 | 0 | + | 4 | 0 | 0 | + |  | 0 | + | 7 |
| 8 | 0 | 2 | 5 |  |  |  | 0 | 0 | 0 | + |  |  | 0 | + | 2 | 0 | + | 5 |
| 7 | 2 | 0 | 5 | $=$ |  |  | 0 | 0 | 0 | + | 2 | 0 | 0 | + |  | 0 | + | 5 |
| 8 | 0 | 0 | 8 | $=$ |  |  | 0 | 0 | 0 | + |  |  | 0 | + |  | 0 | + | 8 |
| 6 | 0 | 3 | 0 | $=$ |  |  | 0 | 0 | 0 | + |  |  | 0 | + | 3 | 0 | + | 0 |

Fill in the missing digits.
a) $2847=2 \times 1000+8 \times 100+4 \times 10+7 \times 1$
b) $6570=6 \times 1000+5 \times 100+7 \times 10+0 \times 1$
c) $4501=4 \times 1000+5 \times 100+0 \times 10+\square \times 1$
d) $6600=6 \times 1000+6 \times 100+0 \times 10+0 \times 1$
e) $965=0 \times 1000+9 \times 100+6 \times 10+5 \times 1$
f) $4059=4 \times 1000+0 \times 100+5 \times 10+5 \times 1$
g) $2874=\boxed{2} \times 1000+\boxed{8} \times 100+\boxed{7} \times 10+\square \times 1$

Write the numbers in the place-value table.
Eight thousand, three hundred and sixty three
Nine thousand and sixty four
Two thousand, seven hundred and five
Six thousand, nine hundred and seventy
Nine hundred and sixteen
$4 \times 1000+3 \times 100+8 \times 10+7 \times 1$
$2 \times 1000+9 \times 100+6 \times 10$
$5 \times 1000+4 \times 10+8 \times 1$
$1 \times 1000+5 \times 100+4 \times 1$
$8000+300+40+2$

| TTh | Th | H | T | U |
| :---: | :---: | :---: | :---: | :---: |
|  | 8 | 3 | 6 | 3 |
|  | 9 | 0 | 6 | 4 |
|  | 2 | 7 | 0 | 5 |
|  | 6 | 9 | 7 | 0 |
|  |  | 9 | 1 | 6 |
|  | 4 | 3 | 8 | 7 |
|  | 2 | 9 | 6 | 0 |
|  | 5 | 0 | 4 | 8 |
|  | 1 | 5 | 0 | 4 |
|  | 8 | 3 | 4 | 2 |

Fill in the missing digits and place values.
a) i) $7312=7 \mathrm{Th}+3 \mathrm{H}+1 \mathrm{~T}+2 \mathrm{U}$
ii) $4067=4 \mathrm{Th}+0 \mathrm{H}+6 \mathrm{~T}+7 \mathrm{U}$
iii) $9304=9 \mathrm{Th}+3 \mathrm{H}+0 \mathrm{~T}+4 \mathrm{U}$
b) i) $6018=6 \mathrm{Th}+0 \square \mathrm{H}+1 \square \mathrm{~T}+8 \mathrm{U}$
ii) $3568=3 \boxed{\mathrm{Th}}+5 \boxed{\mathrm{H}}+6 \boxed{\mathrm{~T}}+8 \mathrm{U}$
iii) $2605=2 \mathrm{Th}+6 \square \mathrm{H}+0 \square \mathrm{~T}+5 \mathrm{U}$

In your exercise book, write ten numbers:
a) in increasing order, starting at 2478 and counting up 7 at a time.

2478, 2485, 2492, 2499, 2506, 2513, 2520, 2527, 2534, 2541
b) in decreasing order, starting at 5093 and counting down 50 at a time.

5093, 5043, 4993, 4943, 4893, 4843, 4793, 4743, 4693, 4643
c) in increasing order, starting at 4803 and counting up 120 at a time.

4803, 4923, 5043, 5163, 5283, 5403, 5523, 5643, 5763, 5883

Join up the equal values.


Page 26

Which numbers do the letters stand for? Write them in the boxes.
a)

b)

c)


Mark with a dot where each letter should be on the relevant number line.
$a=1965 \quad b=9972 \quad c=1999 \quad d=9981 \quad e=1983 \quad f=9965$


Write the next smaller and greater whole tens, hundreds and thousands in the boxes.


Colour the nearest ten red, the nearest hundred green and the nearest thousand blue.

Write in the boxes the numbers described.
a) The smallest 4-digit:
i) number 1000
ii) odd number
1001
b) The greatest 4-digit: i) number 9999
ii) odd number
9999
c) The greatest 4 -digit number divisible by: i) 5
ii) 10
d) The greatest 4 -digit number divisible by 100 which has the same digit in its hundreds and thousands columns.

Write the numbers in the correct places in the set diagrams.

$$
\mathrm{A}=\{0,5,9,12,60,67,275,354,4030,6455,8000\}
$$

|  | Divisible <br> by 5 | Not divisible <br> by 5 |
| :--- | :--- | :--- |
| Even | 0 60 4030 <br> 8000   | 12354 |
| Odd | 5 275 <br> 6455  | 967 |

b)


Round the numbers to the nearest:


b) $8527 \approx$| 8 | 5 | 3 | 0 |
| :--- | :--- | :--- | :--- |

c) $6285 \approx$\begin{tabular}{|l|l|l|l|}
\hline 6 \& 2 \& 9 \& 0 \\
\hline 6

 

\hline 6 \& 3 \& 0 \& 0 \\
\hline 6 \& 0 \& 0 \& 0 \\
\hline
\end{tabular}

d) $3600=$\begin{tabular}{|l|l|l|l|}
\hline 3 \& 6 \& 0 \& 0 \\
\hline

$=$

\hline 3 \& 6 \& 0 \& 0 \\
\hline

$\quad$

\hline 4 \& 0 \& 0 \& 0 \\
\hline
\end{tabular}

e) \begin{tabular}{l}

$9819 \approx$| 9 | 8 | 2 | 0 |
| :--- | :--- | :--- | :--- |
| 9 | 8 | 8 | 0 |$\quad$| 1 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | \\

\hline
\end{tabular}

f) $5499 \approx$\begin{tabular}{|l|l|l|l|}
\hline 5 \& 5 \& 0 \& 0 \\
\hline

$=$

\hline 5 \& 5 \& 0 \& 0 \\
\hline
\end{tabular}

Mark on the number lines those numbers which round to:
a) 4500 , to the nearest hundred

b) 2680 , to the nearest ten

c) 8000 , to the nearest thousand.


Practise addition.
a) $5+2=7 \quad 50+20=70 \quad 500+200=700 \quad 5000+2000=7000$
b) $3+6=9 \quad 30+60=90 \quad 300+600=900 \quad 6000+3000=9000$
c) $8+2=10 \quad 80+20=100 \quad 800+200=1000 \quad 2000+8000=10000$
d) $3+4=7 \quad 32+45=77 \quad 320+456=776$
$3200+4500=7700$

2 Practise subtraction.
a) $8-5=3 \quad 80-50=30 \quad 800-500=300 \quad 8000-5000=3000$
b) $90-40=50900-400=5009000-4000=500019000-4000=15000$
c) $10-3=7 \quad 100-30=70 \quad 1000-300=700 \quad 10000-3000=7000$
d) $7-6=1 \quad 78-64=14 \quad 740-680=60 \quad 7800-6400=1400$

3
Fill in the missing numbers.
a) $30+40=70, \quad 300+400=700, \quad 3000+4000=7000$
b) $80-60=20, \quad 800-600=200, \quad 8000-6000=2000$
c) $30+40=70$,
$300+400=700, \quad 3000+4000=7000$
d) $80-60=20$,
$800-600=200$,
$8000-6000=2000$
e) $8+5=13, \quad 800+500=1300, \quad 8000+5000=13000$
f) $120-90=30,1200-300=900, \quad 12000-9000=3000$

Write operations and calculate the result.
a) What is the sum of 4300 and 2800 ?

$$
\text { . . } 4300+2800=6000+1100=7100
$$

b) What is the difference between 4300 and 2800 ?
. . 4300 - $2800=2300$ - $800=1500$
c) One term in an addition is 1800 . The sum is 5300 . What is the other term?
. . 5300 - - $1800=4300$ - $-800=3500$
d) What is the subtrahend if the reductant is 5300 and the difference is 1800 ? . . 5300 - - $1800=4300$. - 800 $=3500$

1 Do the calculations. Colour the equal results in the same colour.


b) $4600+4000-1000=7600$
f) $9700-1000+200=8900$


d) $3900+4000-600=7300$


2 Calculate the sums as simply as you can. Show your calculations in detail.
a) $360+4900+4100+40$

$$
=(360+40)+(4900+4100)=400+9000=9400
$$

b) $2840+650+3050+160$

$$
=(2840+160)+(650+3050)=3000+3700=6700
$$

c) $410+5330+2390+70$

$$
=(410+2390)+(5330+70)=2800+5400=8200
$$

Do part a) in your exercise book. Use the result to help answer parts b) and c).
Ann had 7500 p. How much more did she have than:
a) Peter if Peter had 2300 p
b) John if John had 2200 p
.7500 .p. - 23000 p = 5200 p. . ( . £52.00) . .
Ann had $5200 \mathrm{p}(=£ 52.00)$ more than Peter.
c) Diane if Diane had 1300 p ?
Ann had 5300.p (= £53.00) more than John.
Ann had 6200 p ( $=$ £62.00) more than Diane.

Do part a) in your exercise book. Use the result to help answer parts b) and c). Each pupil on a school trip spent 3500 p. How much money did:
a) Finlay have left if he took 7000 p . $7000 \mathrm{p}-3500 \mathrm{p}=3500 \mathrm{p}(=£ 35.00)$
Finlay had $3500 \mathrm{p}(=£ 35.00)$ left.
b) Emma have left if she took 6800 p . . Emma hạ 33000 .p ( ( £ £33.00) lefṭ.
c) Lee have left if he took 7300 p ?
. . Lee had 3800 p. (= $£ 38: 00)$ ) left.t. .

Complete the magic squares. a)
The sum of any row, column or diagonal is the same.
b)

| 3500 | 3500 | 2000 |
| :--- | :--- | :--- |
| 1500 | 3000 | 4500 |
| 4000 | 2500 | 2500 |

Page 30

1
Estimate quickly, then calculate the sum.
a) $2653+1746$

$$
\begin{aligned}
& \text { E: } 27000+17000=4400 \\
& \left.C: \begin{array}{|c|c|c|c|}
\hline 2 & 6 & 5 & 3 \\
+ & 1 & 7 & 4
\end{array}\right)
\end{aligned}
$$

b) $\mathbf{1 2 5 6}+7902$

$$
\text { E: } 1300+7900=9200
$$

$C: \begin{array}{r}1 \\ +\quad 2 \\ + \\ \hline\end{array} 9.5062$
c) $5343+2145$

E: $53000+21100=7.4000$
$C: \begin{array}{r}5 \\ \hline\end{array} \begin{array}{r}2 \\ \hline\end{array} 4$

2 Complete the additions and then check them.
a)
b)
c)
d)

|  | 7 | 3 | 7 | 6 |
| :---: | :---: | :---: | :---: | :---: |
| + | 4 | 1 | 7 | 9 |
| 1 | 1 | 5 | 5 | 5 |

$$
\begin{array}{|r|r|r|}
4 & 0 & 3 \\
+3 & 7 & 8 \\
\hline 7 & 8 & 2 \\
\hline
\end{array}
$$

Estimate first then calculate the difference. Check the subtraction in two ways.
a) $8587-5362 \approx 86000-54000=3.2000$
$C: \left.\begin{array}{r}\quad 8 \\ \hline\end{array} \begin{array}{r}5 \\ -\quad 5 \\ \hline\end{array} \right\rvert\,$
Check:

|  | 8 | 5 | 8 | 7 |
| :---: | :---: | :---: | :---: | :---: |
| - | 3 | 2 | 2 | 5 |
|  | 5 | 3 | 6 | 2 |


| 3225 |
| ---: |
| $+\quad 5362$ |
| $\quad 8587$ |

b) 4567-1572 $\approx 4.6000-1.6000=30000$

$C:$|  | 4 | 5 | 6 | 7 |
| ---: | ---: | ---: | ---: | ---: |
| - | 1 | 5 | 7 | 2 |
|  | 2 | 9 | 9 | 5 |

Check:

$$
\begin{array}{|r|r|r|r|}
\hline- & 5 & 6 & 7 \\
- & 2 & 9 & 9 \\
\hline & 1 & 5 & 7 \\
\hline
\end{array} \quad \begin{array}{r}
2 \\
\hline
\end{array} \quad 5 \begin{array}{rlr|r|}
\hline & 5 & 7 & 2 \\
\hline
\end{array}
$$

The sum of any two adjacent numbers is the number directly above them. Fill in the missing numbers.
a)

a) \begin{tabular}{l}
\multicolumn{1}{c|}{10000} \\

| 5400 | 4600 |  |
| :--- | :--- | :--- |
| 3600 | 1800 | 2800 | \\

\hline
\end{tabular}




Page 31

Do the operations in the correct order.

## Calculations

a) i) $8152-3728+1596=6020$
ii) $(8152-3728)+1596=6020$
iii) $8152-(3728+1596)=2828$
b) i) $7020-3158-1976=1886$
ii) $(7020-3158)-1976=1886$
iii) $7020-(3158-1976)=5838$

Fill in the missing numbers.
a) $3600+1800=$ $\square$


b) | 12500 | - | 3500 |
| :---: | :---: | :---: |
| - | - | - |

| 7200 <br> $=$$-$1800 <br> $=$ | $=$5400 <br> $=$ |
| :---: | :---: |
| 5300 | 1700 |$=3600$

Solve the problem.
The castle is 9 km 68 m from the forest. There is a waterfall between the castle and the forest. It is 2 km 456 m nearer to the castle than to the forest.


How far away is the waterfall from the castle?
$a=(9068 \mathrm{~m}-2456 \mathrm{~m}) \div 2=6612 \mathrm{~m} \div 2=3306 \mathrm{~m}$
The waterfall is 3306 m from the castle.

Write a plan, do the calculation and write the answer in your exercise book.
a) In Appletown, the number of inhabitants is 6548. The number of females is 3308. How many males live there? 3240 males live in Appletown.
b) In Bananaville, there are 5476 females, 260 more than the number of males.

How many males live there? 5216 males live in Bananaville.
c) There are 9500 inhabitants in Dombleland, 2500 more adults than children.

How many adults and how many children live there?
6000 adults and 3500 children live in Dombleland.

Write the products.
a) $3 \times 6=18 \quad 30 \times 6=180 \quad 3 \times 60=180 \quad 30 \times 60=1800$
b) $8 \times 4=32 \quad 80 \times 4=320 \quad 800 \times 4=3200 \quad 80 \times 40=3200$
c) $9 \times 3=27 \quad 90 \times 3=270 \quad 9 \times 300=2700 \quad 90 \times 30=2700$
d) $8 \times 7=56 \quad 80 \times 7=560 \quad 8 \times 70=560 \quad 800 \times 7=5600$
e) $6 \times 7=42 \quad 60 \times 7=420 \quad 600 \times 7=4200 \quad 6 \times 700=4200$
f) $\quad 9 \times 9=81 \quad 90 \times 9=810 \quad 900 \times 9=8100 \quad 90 \times 90=8100$

2 Fill in the missing numbers.
a) $8 \times 3=248 \times 30=240 \quad 8 \times 300=2400$
b) $5 \times 9=455 \times 90=450 \quad 5 \times 900=4500$
c) $6 \times 5=306 \times 50=3006 \times 500=3000$
d) $9 \times 4=36 \quad 9 \times 40=360$
$90 \times 40=3600$
e) $4 \times 7=28 \quad 40 \times 7=280$
$40 \times 70=2800$
f) $6 \times 9=54$
$60 \times 9=540$
$60 \times 90=5400$

3 Write the products.
a) $3 \times 4=12$
$13 \times 4=52$
$43 \times 4=172$
$30 \times 4=120$
$300 \times 4=1200$
$130 \times 4=520$
$1300 \times 4=5200$
$430 \times 4=1720$
$4300 \times 4=17200$
b) $9 \times 2=18$
$90 \times 2=180$
$900 \times 2=1800$
$19 \times 2=38$
$190 \times 2=380$
$1900 \times 2=3800$
$89 \times 2=178$
$890 \times 2=1780$
$8900 \times 2=17800$

Fill in the missing numbers.
a) $36 \div 6=6 \quad 360 \div 6=60 \quad 3600 \div 60=60 \quad 3600 \div 6=600$
b) $72 \div 8=9 \quad 720 \div 8=90 \quad 7200 \div 80=90 \quad 7200 \div 8=900$
c) $45 \div 5=9 \quad 450 \div 5=90 \quad 4500 \div 50=90 \quad 4500 \div 5=900$
d) $24 \div 8=3,240 \div 80=3,240 \div 8=30,2400 \div 80=30$
e) $35 \div 7=5,350 \div 70=5,350 \div 7=50,3500 \div 70=50$
f) $24 \div 4=6,240 \div 40=6,240 \div 4=60,2400 \div 40=60$

Fill in the missing numbers.

a) | Th | H | T | U |
| :---: | :---: | :---: | :---: |
| 3 | 2 | 5 | 1 |
| 3 | 2 | 5 | 1 |
| 3 | 2 | 5 | 1 |
| 9 | 7 | 5 | 3 |

| Th | H | T | U |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 2 | 5 | 1 | $\times$ | 3 |
| 9 | 7 | 5 | 3 |  |  |

$3 \times 1 \mathrm{U}=3 \mathrm{U}$
$3 \times 5 \mathrm{~T}=15 \mathrm{~T}=1 \mathrm{H}+5 \mathrm{~T}$
$3 \times 2 \mathrm{H}+1 \mathrm{H}=7 \mathrm{H}$
$3 \times 3 \mathrm{Th}=9 \mathrm{Th}$
b)

$4 \times 6 \mathrm{U}=24 \mathrm{U}=2 \mathrm{~T}+4 \mathrm{U}$
$4 \times 5 \mathrm{~T}+2 \mathrm{~T}=22 \mathrm{~T}=2 \mathrm{H}+2 \mathrm{~T}$
$4 \times 7 \mathrm{H}+2 \mathrm{H}=30 \mathrm{H}=3 \mathrm{Th}+0 \mathrm{H}$
$4 \times 1 \mathrm{Th}+3 \mathrm{Th}=7 \mathrm{Th}$

Estimate first, then calculate with addition and with multiplication.
a) $E: 2600 \times 4=10400$
b) $E: 1700 \times 6=10200$

$$
\begin{array}{r}
2647 \\
2647 \\
2647 \\
+2647 \\
\hline 0588 \\
\hline 10647 \\
\hline 105
\end{array}
$$

$$
\begin{aligned}
& 1678 \\
& 1678 \\
& 1678 \\
& 1678 \\
& 1678 \\
& \begin{array}{r}
1678 \\
+10068 \\
\hline 10068 \\
\hline
\end{array}
\end{aligned}
$$

Which is more? How many more? Write in the missing signs and differences.
a) 6 times $1480 \Theta 3$ times 2960
b) 9 times $875 \geqslant 5$ times 1420 775
c) 4 times 3100

d) 8 times 734 2 times 2931

Write these digits in the boxes so that the product is less than 10000 and it is E) a. odd
b) even
c) a 4-digit number

| 2 | 6 | 4 | 5 |
| :--- | :--- | :--- | :--- |
| 7 | 9 | 3 | 5 |$\times$| 3 |
| :--- |


| 2 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- |
| 7 | 3 | 6 | 8 |$\times$| 3 |
| :--- |



Fill in the missing numbers.
a) $8 \times 6=48$

$$
\begin{aligned}
& 4 \times \square=48 \\
& 16 \times 3=48
\end{aligned}
$$

b) $36 \div 9=4$

$$
360 \div 90=4 \quad 3600 \div 90=40
$$

$80 \times 6=480$
$40 \times 12=480$
$160 \times 3=480$

$$
360 \div 9=40
$$


$400 \times 12=4800$
$1600 \times 3=4800$

$$
3600 \div 9=400
$$

$$
3600 \div 90=40
$$

$$
3600 \div 900=4
$$

Divide 7640 into 3 equal parts. Fill in the missing items.

Calculation:

|  | Th |  | T |  | U |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | 5 | 4 |  | 6 |
| 3 | 7 | 6 | 4 |  | 0 |
| - | 6 |  |  |  |  |
|  | 1 | 6 |  |  |  |
| - | 1 | 5 |  |  |  |
|  |  | 1 | 4 |  |  |
|  | - | 1 | 2 |  |  |
|  |  |  | 2 |  | 0 |
|  |  | - | 1 |  | 8 |
|  |  |  |  |  | 2 |

E: $6000<7640<9000$
$2000<$ quotient $<3000$

## r 2 Details:

$7 \mathrm{Th} \div 3=2 \mathrm{Th}$, because
$2 \mathrm{Th} \times 3=6 \mathrm{Th}$, and 1 Th remains.
$1 \mathrm{Th}+6 \mathrm{H}=16 \mathrm{H} ; \quad 16 \mathrm{H} \div 3=5 \mathrm{H}$, because
$5 \mathrm{H} \times 3=15 \mathrm{H}$, and 1 H remains.
$1 \mathrm{H}+4 \mathrm{~T}=14 \mathrm{~T}$; $14 \mathrm{~T} \div 3=4 \mathrm{~T}$, because
$4 \mathrm{~T} \times 3=12$ T , and 2 T remains.
$2 \mathrm{~T}+0 \mathrm{U}=20 \mathrm{U}$, $20 \mathrm{U} \div 3=6 \mathrm{U}$, because
$6 \mathrm{U} \times 3=18 \mathrm{U}$,
and 2 U remains.

Do the divisions and check them with multiplication.
a)

|  | Th |  | T | U | r 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 1 |  |
| 5 | 6 | 1 | 5 | 7 |  |
| - | 5 |  |  |  | $\leftarrow 1 \mathrm{Th} \times 5$ |
|  | 1 | 1 |  |  |  |
| - | 1 | 0 |  |  | $\leftarrow 2 \mathrm{H} \times 5$ |
|  |  | 1 | 5 |  |  |
|  | - | 1 | 5 |  | $\leftarrow 3 \mathrm{~T} \times 5$ |
|  |  |  | 0 | 7 |  |
|  |  | - |  | 5 | $\leftarrow 1 \mathrm{U} \times 5$ |
|  |  |  |  | 2 |  |

b)


Ch:

| 1 | 2 | 3 | 1 | $\times$ | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | 1 | 5 | 5 |  |  |
|  |  |  | + | 2 |  |
| 6 | 1 | 5 | 7 |  |  |

Page 35
C

|  | 9 | 1 | 8 | $\times$ | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | 3 | 4 | 4 |  |  |

How many unit cubes have been used to build the cuboids?
Calculate the volume in 3 different ways.
E.g:
a)

b)

$V=8 \times 2 \times 4=64$ units
$V=6 \times 7 \times 4=168$ units
$V=8 \times 4 \times 2=64$ units
$V=6 \times 4 \times 7=168$ units
$V=4 \times 2 \times 8=64$ units
$V=7 \times 4 \times 6=168$ units

2 Fill in the missing numbers.
a) $1256 \times 6=1256 \times 5+1256$
b) $2432 \times 3=2433 \times 3-3$

3 a a) How many squares can you count in this diagram? ...5...
b) How many squares could you count in
i) 675 of these diagrams
. . . 337.5
ii) $\quad 1060$ of these diagrams?
. . . 5300.

4 Solve the problems in your exercise book.
a) 964 soldiers are on parade. They are marching in rows of 6 .
i) How many rows are there?
There are 161 rows.
ii) Does the last row contain fewer soldiers than the other rows?

One of the rows contains 2 fewer soldiers
b) What would your answers be if the soldiers were marching in a rows of 8 ?

There would be 120 rows of 8 and one row of 4 soldiers $=121$ rows .

Fill in the missing numbers.

b) $9360 \xrightarrow{\div 4} 2340 \stackrel{5}{\longrightarrow} 468 \xrightarrow{\div 2} 4234 \xrightarrow{\div 6} 49$
c) $9360 \xrightarrow{\div 3} 3120 \xrightarrow{\div 6} 520 \stackrel{\div}{\longrightarrow} 404 \xrightarrow{\div 4}{ }^{\circ}+26$

1

|  |  |
| :--- | :--- |
|  |  |

a) How many rectangles are in this diagram?
. .9...
b) How many rectangles would be in 874 such diagrams? .7.8.6. .
c) What is the area of the diagram?

$$
A=\text { 4.squạre.units. . . . . . . }
$$

d) What is the perimeter of the diagram?
$P=.8$ units.

2 Scale: 1 cm on the diagram $\rightarrow 875 \mathrm{~m}$ in real life
a) How far away in real life is:
i) Bearsden from Antsnest?
ii) Cricketfield from Antsnest?
.2625.m. . . . . .
b) What distance in real life is the round trip? .7000.m. . . . . . . . . . . . . . . . .
a) Draw 9-unit perimeters which enclose a triangle,
E.g: a quadrilateral and a pentagon.


## b) Draw 16-unit perimeters which enclose different rectangles.



Measure 2 cm from point C on the lines. Join up the points.
a)

b)


What shapes have you made? . . Ḥạẹ made rectangles. Iṇ. b) the shape is also a square.

In your exercise book, make a plan, estimate, calculate, check and write the answer as a sentence.
a) The highest mountain in Europe is Mont Blanc which is 4810 m high. It is 4032 m lower than Mount Everest. How high is Mount Everest? Mount Everest is 8842 m high.
b) The River Danube is 2850 km long and the River Nile is 6670 km long. How much longer is the River Nile than the River Danube?

The River Nile is 3820 m longer than the River Danube.
c) The deepest point in the Pacific Ocean is near Japan and is 10680 m below sea level. The highest point in Japan is 3776 m above sea level.
What is the difference between these two points?
The difference between the two points is 14 km 456 m .

Mark the parallel and perpendicular lines on this capital E.
We started to draw the letter E on this grid in different positions and sizes. Complete the drawings.


List the polygons for which each statement is true.

a) It has a right angle.
. $1,4,5,5,6,7 . . . . . .$.
b) Every angle is a right angle. $\qquad$
c) It has no right angles.
. 2, 3, 8 . . . . . . . . . . . . .
d) It has an angle which is not a right angle.
. 1, 2, 3, $, 5,7,8$. . . . . . .
e) Every angle is a right angle but it is not a rectangle. .None. . . . . . . . . . .
 The minute hand on the clock is pointing to 12 o'clock. Through how many right angles will it turn after
a) 15 minutes
b) 30 minutes
2
c) 45 minutes?3

In your exercise book, make a plan, estimate, calculate, check and write the answer as a sentence.
a) The distance between Budapest (Hungary) and London (UK) is 1450 km . It is 5950 km less than the distance between Washington (USA) and Budapest. How far is Washington from Budapest?

Washington is 7400 km from Budapest.
b) A tourist drew this rough map of where he had travelled.

i) How far did he travel from Lisbon to Budapest?

He travelled 3434 km.
ii) Which part of his route was longer, Lisbon to Paris or Paris to Budapest? Lisbon to Paris was the longer part.

In a dress pattern, there are these different shapes of pocket to choose from.
$A \quad B \quad D \quad E \quad F \quad \mathrm{C}$

$J \quad K \quad L$

List the shapes for which each statement is true.
a) It has only straight sides.

$$
\ldots, \mathrm{A}, \mathrm{~B}, \mathrm{D}, \mathrm{~F}, \mathrm{G}, \mathrm{H}, \mathrm{~J}, \mathrm{~L} .
$$

b) It has at least one straight side.
. A, B , C., D, E, F: G, G, H, J, K, L
c) It has only curved lines. I. . . . . .
d) It is a pentagon. . D., J. . . . . . .
e) It has parallel sides.

$$
\ldots \mathrm{A}, \mathrm{~B}, \mathrm{D}, \mathrm{~F}, \mathrm{H}, \mathrm{~J}, \mathrm{~L}
$$

f) It has perpendicular sides.
. B, D, E, F, H, J, L . . . . . . . . .
g) It is a quadrilateral. A, B, F, G, G, L
h) It is a hexagon. . $\mathrm{H} . . . .$.
i) It is a rectangle. $\mathrm{F}, \mathrm{L}$. . . . . .
j) It is a square . . L. . . . . . .

Draw a line through the point given so that it is parallel to the other two lines.


Do the calculations for b) and c) in your exercise book.
a) How many unit cubes does this cube contain? ...8...
b) How many unit cubes would 1176 of these cubes contain? 9408
c) How many of these large cubes could be built from 9648 unit cubes? 1206
a) In each diagram, mark

- right angles in red like this, $R$
- angles smaller than a right angle in blue like this,

- angles larger than a right angle in green like this.





b) List the letters of the shapes for which each statement is true.
i) It is a square.
ii) It is a rectangle.
C,, F. . . . .
iii) It is a quadrilateral. A, $\mathrm{B}, \mathrm{C}, \mathrm{F}, \mathrm{F}$ iv) It is a triangle. .D, E, H. . . .
v) It has at least one right angle.

B, C, $\mathrm{D}, \mathrm{F}$
vi) Every angle is a right angle.
C. F .
vii) It has at least one angle smaller than a right angle. A, B, D., E, H
viii) All its angles are smaller than a right angle.
ix) It has at least one angle larger than a right angle. E. . . . . . . . . A, B, $\mathrm{B}, \mathrm{G}, \mathrm{H}$.
x) All its angles are larger than a right angle. $\qquad$

Two sides of a quadrilateral have been drawn. Complete the shape so that:
a) it has at least
b) 2 of its sides
c) it has 2 pairs of
E.g: one right angle
E.g: are parallel parallel sides.


