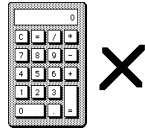
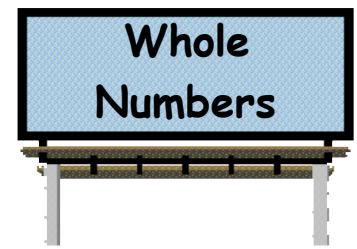


Chapter 1



Calculators should **not** be used anywhere in this Chapter unless you are otherwise instructed.



Exercise 1

1. Write the following numbers out fully in words :-

- (a) 3040 (b) 5801 (c) 20 300 (d) 40 050 (e) 10 010 010

2. Write the following numbers out fully in words:-

- (a) sixteen thousand and one (b) Eight hundred thousand and eighty
(c) ten million, one hundred thousand (d) one hundred million and ten.

3. Put the following sets of numbers in order, highest first:-

- (a) 9048, 9090, 8999, 10 010 (b) 10 999, 11 001, 9999, 10 090, 10 100, 100 000

4. Write down the number that is :-

- (a) 200 after 8912 (b) 101 before 10 050
(c) 80 008 before 170 000 (d) 2000 after 199 400



5. What number lies half-way between :-

- (a) 10 000 and 15 000 (b) 8500 and 10 000

6. Write out in figures :-

- (a) 100 million (b) 0.5 million (c) 3.5 million (d) 0.8 million.

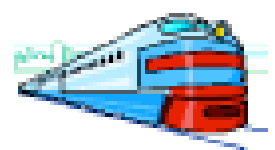
Exercise 2

1. Do the following mentally. Just write down the answers to :-

- (a) $57 + 48$ (b) $123 + 490$ (c) $530 - 170$ (d) $11\ 000 - 8550$

2. Do the following mentally :-

- (a) A train carrying 84 passengers stops at a station and 27 get off the train. How many passengers are still on the train?
(b) One hundred and ninety two passengers disembark from an aeroplane. If there are two hundred and seventeen passengers still on board, how many passengers were originally on the plane?



cont'd

Exercise 4

1. Write down the answers to the following :-

- (a) $20 \div 10$ (b) $300 \div 10$ (c) $14\ 000 \div 10$ (d) $200\ 000 \div 10$
 (e) $1\ 000\ 000 \div 10$ (f) $400 \div 100$ (g) $8000 \div 100$ (h) $5400 \div 100$
 (i) $99\ 000 \div 100$ (j) $120\ 400 \div 100$ (k) $8000 \div 1000$ (l) $42\ 000 \div 1000$
 (m) $870\ 000 \div 1000$ (n) $909\ 000 \div 1000$ (o) $1000 \div 1000$

2. There are 1000 ml (millilitres) in a litre.

How many litres in :- (a) 50 000 ml (b) 100 000 ml (c) a million litres?

3. A virus grows at a steady rate and produces 900 million bacteria in 10 hours.

How many bacteria will it produce in one hour?

**Exercise 5**

1. Copy the following and complete the calculation :-

- (a)
$$\begin{array}{r} 571 \\ \times 3 \\ \hline \end{array}$$
 (b)
$$\begin{array}{r} 435 \\ \times 7 \\ \hline \end{array}$$
 (c)
$$\begin{array}{r} 708 \\ \times 9 \\ \hline \end{array}$$
 (d)
$$\begin{array}{r} 5555 \\ \times 8 \\ \hline \end{array}$$

2. Rewrite each if these in the above form and complete the calculation :-

- (a) 207×6 (b) 824×8 (c) 1057×4 (d) 5×888

3. Show all your working in answering the following questions :-

- (a) Mrs. Brown is paid £1408 a month. How much would she earn in 9 months?
 (b) How many hours in a week?
 (c) How many seconds in 4 hours?
 (d) Find $8 \times 4 \times 56$.

4. Find $10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$.

**Exercise 6**

1. Set down and complete :-

- (a)
$$\begin{array}{r} 248 \\ \times 26 \\ \hline \dots\dots \\ \dots\dots 0 \\ \hline \dots\dots\dots \\ \hline \end{array}$$
 (b)
$$\begin{array}{r} 546 \\ \times 59 \\ \hline \dots\dots\dots \\ \dots\dots\dots 0 \\ \hline \dots\dots\dots \\ \hline \end{array}$$
 (c)
$$\begin{array}{r} 704 \\ \times 72 \\ \hline \dots\dots\dots \\ \dots\dots\dots \\ \hline \dots\dots\dots \\ \hline \end{array}$$
 (d)
$$\begin{array}{r} 555 \\ \times 55 \\ \hline \dots\dots\dots \\ \dots\dots\dots \\ \hline \dots\dots\dots \\ \hline \end{array}$$

2. Set down in the manner shown above and find :-

- (a) 204×24 (b) 157×83 (c) 941×19 (d) 3241×237

Exercise 7

1. Copy the following and complete the calculation :-

(a) $7 \overline{)3808}$

(b) $5 \overline{)9265}$

(c) $6 \overline{)7434}$

(d) $8 \overline{)5216}$

2. Set down in the manner shown above and complete the calculation :-

(a) $7277 \div 7$

(b) $5175 \div 9$

(c) $\frac{4506}{6}$

(d) $\frac{6016}{8}$

3. Show all your working in answering the following questions :-

(a) How many weeks are in 343 days?

(b) Golf balls are packed with 6 in each box.

How many boxes are needed for 258 balls?

(c) A nine hole golf course has length 1973 yards.

Find the average length of each hole.

(d) A pack of golf tees contains 8 tees.

How many packs are needed for 2248 tees?



4. Find the remainder each time :-

(a) $412 \div 7$

(b) $555 \div 4$

(c) $1000 \div 3$

(d) $4000 \div 7$

5. Marbles are packed into packets of nine.

(a) How many packets are needed for 3871 marbles?

(b) How many marbles are left over?



6. You may use a calculator here, but show how you obtained your answers :-

(a) $471 \div 14$

(b) $888 \div 33$

(c) $1000 \div 85$

(d) $1111 \div 123$.

Exercise 8

1. Try to do the following mentally :-

(a) 32×30

(b) 41×60

(c) 50×321

(d) 404×90

(e) 12×300

(f) 42×400

(g) 500×21

(h) 800×312

(i) 9021×30

(j) 312×7000

(k) $2000 \div 20$

(l) $4400 \div 400$

(m) $80400 \div 200$

(n) $1 \text{ million} \div 2000$

(o) $10 \text{ million} \div 50000$



2. Calculate each of the following (not necessarily mentally) :-

- (a) 224×30 (b) 512×80 (c) 40×875 (d) 123×200
 (e) 414×300 (f) 6000×41 (g) $20\,200 \times 40$ (h) 2012×800
 (i) $986 \times 20 \times 50 \times 40$ (j) $20 \times 30 \times 87 \times 50 \times 10$

3. A box contains 50 matches.

How many matches are in :- (a) 50 boxes (b) 231 boxes?

4. An equal amount of 34 100 marbles have to be put into 200 jars.

How many marbles will be in each jar?

5. A jar hold 340 sweets. A box hold 20 jars. A crate holds 30 boxes.

How many sweets would be in 20 crates ?



Exercise 9

1. Round to the nearest 10 :-

- (a) 71 (b) 78 (c) 129 (d) 1995

2. Round to the nearest 100 :-

- (a) 291 (b) 78 (c) 781 (d) 23 559

3. Round to the nearest 1000 :-

- (a) 4500 (b) 7299 (c) 18 901 (d) 1 234 567

4. Sound travels through water at a speed of 1460 metres per second. Round this figure to the nearest :-

- (a) 10 (b) 100 (c) 1000.

5. A fossil was discovered and was carbon dated at 127 891 years old. Round this figure to the nearest :-

- (a) 10 (b) 100 (c) 10 000 (d) 100 000.

Exercise 10



Estimate each of the problems below mentally.

1. Round each answer and give an estimate to :-

- (a) 59×19 (b) 402×99 (c) 379×320
 (d) $894 \div 38$ (e) $512 \div 22$ (f) $1961 \div 197$



2. Nineteen houses in a street use 311 litres of water each every day.

How many litres of water is this altogether?

3. The number of termites found in 196 mounds was 131 089.

How many on average would each mound have ?

Revision Exercise

- Write out the number 2 040 800 in words.
- Write these numbers using figures :- (a) one hundred thousand and thirty (b) 10.5 million.
- Try these questions mentally :-

(a) 18×10	(b) 45×100	(c) 1000×432	(d) $23 \times 20 \times 30$
(e) $780 \div 20$	(f) 23×30	(g) 821×40	(h) $230\,000 \div 1000$
(i) $39\,000 \div 300$	(j) $4900 \div 700$	(k) $4\,963\,000 \div 700$	

(k) A fishing trip company stocks 320 jars of worms. Each jar contains 30 worms.
How many worms in total does the company stock?

(l) On a fish farm 23 400 fish are kept in 30 tanks.
If each tank has the same number of fish, how many fish are in each tank?



Show all working for question 4 to 6.

- (a) At the cup final the attendance was : Rovers 12 829 supporters, United 13 482 supporters.
 - What was the total attendance?
 - How many more United supporters were there?

(b) Seven of the United team were being paid £8435 each.
How much is this in total?

(c) Six Rovers players were being paid a total of £45 812.
If they were paid equal amounts, how much were they paid each ?
- (a) Boy band BLoos are buying a new tour bus which costs £143 850.
Round this number to the nearest :- (i) £100 (ii) £1000 (iii) £10 000

(b) The band are paying over 48 months.
Round each number to 1 figure accuracy and give an estimate for each monthly payment.

(c) The bus can seat 36 passengers.
How many trips will the bus have to make to transport all 226 tour crew?



- John has a CD collection.
When he puts them in piles of two,
three or four he has one left over.
He has none left when he puts them in piles of seven.
What is the least number of records John can have?

