## Easj Coing <br> MATHEMATICS

## 11+

## Work Book

BOOK 5

## Acknowledgements

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M.Nat

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## EASY GOING

# MATHEMATICS 

11+ (CEM)

## BOOK 5

This book belongs to:
M. NAT BSc, BEd, PGCE

TGL Publications

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## Exercise 1.1

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) Add together seven, five and seventeen.
2) Write nought point nine as a fraction.
3) The side of a square is 7 cm . What is the area of the square?
4) Multiply four point two by hundred.
5) Multiply eight by eleven.
6) Convert eight point three metres into centimetres.
7) How many more than 38 is 60 ?
8) Subtract the sum of 7 and 9 from 26.
9) Convert 7.30am to 24 hour time.
10) Sira uses six metres of foil from a 20 metres roll. What length is left?
11) How many days of my twenty two day holiday remain after 8 days?
12) How many twelves are there in 360 ?
13) Write the prime numbers between 10 and 20.
14) Ten per cent of a number is 18 . What is the number?
15) I have 3 maths books and 5 science books. What is the fraction of my science book to maths book?
16) Thirty two per cent of the people voted for the labour party. What percentage of the people didn't vote for the labour party?
17) What is 8000 divided by 20 ?
18) What is the difference between 5.8 and 1.3 ?
19) Divide 81 pounds between three people.
20) What is the change from $£ 20$ note after spending £8.20?
21) 
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23) 
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39) $\qquad$
40) $\qquad$

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) How many millimetres are there in 5 metres?
2) Subtract 17 from 60 ?
3) If 1600 counters are shared between 200 pupils, how many counters will each pupil receive?
4) Evaluate $3^{3}$.
5) Write $\frac{2}{5}$ as a decimal.
6) A shirt cost $£ 12.75$. I get a discount of $£ 5$. How much do I pay?
7) Find $\frac{1}{3}$ of 72.
8) Write the number 'thirteen thousand and fifty nine' as number.
9) Write the equivalent fraction for $\frac{2}{3}$ with the
denominator of 9 .
10) Write this fraction in the lowest term: $\frac{12}{15}$
11) Write $\frac{1}{4}$ as percentage.
12) What are two nineteen?
13) Write $65 \%$ as decimal.
14) What is double of 64 ?
15) Keeth has sixteen dogs. He sells twelve of them. How many does he have left?
16) There are 144 labels in a bag. How many labels are there in 8 bags?
17) Six friends divide their winnings of $£ 72$ equally between them. How much does each friend receive?
18) Ruban scores 9,8 and 12 in his last three tests . What is his total score?
19) 8 pens cost $£ 33.60$. How much does each pen cost?
20) A theatre has an audience of 235 on Monday and 195 on Saturday. What was the total number of audience for both days?
21) 
22) $\qquad$
23) $\qquad$
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Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) What is $50 \%$ of $£ 72$ ?
2) Add together 24,18 and 8 .
3) How many minutes are there in between 6.25 p.m. and 11.55 a.m.?
4) How much more than $£ 112$ is $£ 400$ ?
5) How much is $\frac{1}{2}$ of $£ 620$ ?
6) A thread of length 410 cm is cut into two equal pieces. How long is each piece?
7) Peter weighs 11 stones. Jane weighs 120kg. Who is heavier?
8) How many 21 p stamps can I buy for two pounds?
9) What is one third of a half of 18 ?
10) A man celebrated his $72^{\text {nd }}$ birthday in 1984. In what year was he born?
11) $2,3,2,2,4,5$. What is the mode of these numbers?
12) What is the number half way between eleven and thirteen?
13) Work out 300 times 600.
14) Write down twelve thousand pence in pounds.
15) How many minutes are there in four hours and fifty minutes?
16) What is the perimeter of a square of side 16 cm ?
17) Take away 3 from seven times eight.
18) What is half of a quarter?
19) $3^{3}$ is bigger than $4^{2}$. True or false?
20) My age is 25 now. After 17 years what is my age?
21) $\qquad$
22) $\qquad$
23) $\qquad$
24) $\qquad$
25) $\qquad$
26) $\qquad$
27) $\qquad$
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40) $\qquad$

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) 12.0349 . What is the value of 4 ?
2) Multiply 0.03 by 1000 .
3) Sheela wants to buy a new washing machine priced $£ 475$, but finds that she is $£ 65$ short. How much does money she actually have?
4) A temperature of $4^{\circ} \mathrm{C}$ falls by 8 degrees. What is the new temperature?
5) Bring $\frac{27}{108}$ to its lowest term.
6) Find $\frac{11}{12}$ of 144 .
7) Change $2 \frac{7}{8}$ into improper fraction.
8) Change $\frac{51}{5}$ into mixed number.
9) Red rope is 0.75 cm and white rope is 0.25 cm . What is the total of red and white rope?
10) $6: 5=x: 10$ What is $x$ ?
11) $6 \longrightarrow+5 \longrightarrow+2 \longrightarrow x$ What is $x$ ?
12) $(-8)+(-7)=$
13) $11,12,13,14,15,16$ : which of these is a multiple of 5 ?
14) Are these numbers in ascending or descending order: $0,-1,-6,-8$ ?
15) 

$x / 35^{\circ}$ Calculate $x$ ?
16) Complete the following:

$$
\frac{1}{3}=\frac{?}{6}=\frac{4}{12}=\frac{?}{21}
$$

17) What is the first square number between 2 and 20.
18) $\qquad$ $--4=22$
19) State the next two numbers in this pattern: 73,69 , 65, 61
20) Solve the following equation: 11-x=5
21) $\qquad$
22) $\qquad$
23) $\qquad$
24) $\qquad$
25) $\qquad$
26) $\qquad$
27) $\qquad$
28) $\qquad$
29) $\qquad$
30) $\qquad$
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Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) Simplify $w+w+w+3 w$
2) Simplify $b \times b \times c$
3) Multiply out the brackets: $3(2 x+5 y)$
4) $p=5, q=8$. Use these values and find the value of $4(q-2 p)$.
5) I think of a number and multiply it by 4, this gives me 48. What is the number?
6) Write an expression for 5 less than $x$
7) An isosceles triangle's angles are $40^{\circ}, 40^{\circ}$. Calculate the third angle.
8) Find the area of the rectangle that is 7 cm by 12 cm .
9) Write down the 1st prime number after 33.
10) Work out $1 \%$ of 50.
11) How many 5 p coins make 95 p?
12) Three angles in a quadrilateral are $75^{\circ}, 115^{\circ}$ and $55^{\circ}$. What is the fourth angle?
13) Add together 97 and 65.
14) Increase the price of $£ 300$ by $10 \%$.
15) What is the number mid way between 0.3 and 0.4.
16) Write the number 'one thousand five hundred and sixty seven' to the nearest hundred.
17) Add together seven, nineteen and thirty nine.
18) How many grams are there in three point five kilograms?
19) How many twos are there in three hundred and forty?
20) What is two third of three hundred?
21) 
22) $\qquad$
23) $\qquad$
24) $\qquad$
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40) $\qquad$

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) Multiply seven by four.
2) Subtract three point seven from ten.
3) How many millimetres are there in seven and a half centimetres?
4) Add together ninety five and seventy two.
5) What is half of seven thousand eight hundred?
6) What is twenty per cent of ten thousand?
7) What is the difference between 'nine hundred' and 'three hundred and twenty one'?
8) What is two fifth of thirty five?
9) Round three point seven six to one decimal place.
10) What is seventy two multiplied by eight?
11) What is the total of all four angles in a quadrilateral?
12) How many minutes are there in two and a half hours?
13) Two cereal bars cost forty five pence together. How much will it cost to buy four of them? Give your answer in number form.
14) What is two minus zero point one nine?
15) Each side of a square is two point five centimetres long. What is the perimeter of that square?
16) Multiply, zero point zero seven six, by hundred.
17) $\begin{array}{lllll}7 & 0 & -7 & \text { : What is the next number? }\end{array}$
18) What is the remainder when you divide fifty eight by seven?
19) Write the number which is in the middle of 'one hundred and ten' and 'one hundred and thirty'?
20) Add the numbers, 'one thousand and one' and 'two thousand and nine' together.
21) 
22) $\qquad$
23) 
24) $\qquad$
25) $\qquad$
26) $\qquad$
27) $\qquad$
28) $\qquad$
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40) $\qquad$

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) What is four times two hundred and fifty?
2) What is the total of 'two hundred and twenty' and 'seventy'?
3) Double one point eight.
4) What is one hundred less than ten thousand?
5) I had one pound. I bought two pencils each nineteen pence and one pen thirty pence. How much do I have now?
6) A rectangle measures twelve centimetres by five centimetres. What is its area?
7) How many sevens are there in forty nine?
8) What fraction of two pounds in twenty pence?
9) Divide nought point six by thousand.
10) Add together 'two and a half' and 'four and half'.
11) Add 'four hundred and eighty two' and 'three hundred and eight'.
12) Subtract 'one hundred and two' from 'eight hundred and eight'.
13) I think of a number, subtract ten and double the result. The answer is forty four. What is the number I thought of?
14) One book cost two pound and eighty five pence. How much does six books cost?
15) What temperature is ten degrees Celsius lower than eight degrees Celsius?
16) Add together nine and ten, then multiply the result by three.
17) Two pencils cost seventy eight pence. What is the cost of six pencils?
18) Imagine a triangular prism, how many faces does it have?
19) In a group of forty two children, there are twice as many boys as girls. How many boys are there?
20) Divide nought point nought nought nine by hundred.
21) 
22) $\qquad$
23) 
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Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) Double five point five, then double the answer.
2) The area of a square is one hundred centimetres squared. What is the length of one side.
3) Subtract twenty seven from two hundred?
4) Write three hundredth as decimal?
5) What is seven point nought nought three multiplied by thousand?
6) Write the equivalent fraction for $\frac{3}{4}$ with the denominator of 12.
7) Two angles make a right angle. One of the angles is fifty nine degrees. What is the other angle?
8) Divide eighty four by four.
9) How many fifties are there in two thousand?
10) Multiply zero point zero zero one eight by thousand.
11) What is two hundred and sixty three rounded to the nearest hundred?
12) How many grams must you add to four hundred and fifty grams to make half a kilogram?
13) A pencil costs one pound and twenty five pence. How much will eight pencils cost?
14) What is ten per cent of thirty?
15) What is one per cent of three hundred?
16) Change 2.45 p.m. to 24 -hour time.
17) Subtract forty five from two hundred.
18) How many hours is it from 10 p.m. today to 7 a.m. tomorrow.
19) Write a fraction with numerator 5 that also is equivalent to ten fourteenths.
20) Write the first prime number that comes after seventy five.
21) 
22) $\qquad$
23) 
24) $\qquad$
25) $\qquad$
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39) $\qquad$
40) $\qquad$

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) Multiply seventy five by six.
2) Four apples cost ninety six pence. How much does each apple cost to the nearest penny.
3) Write one prime number that is between thirty and thirty five.
4) Add three point five to seven point five.
5) Add together twenty three, twenty one and twenty.
6) Multiply seven by eight.
7) Eight is half of a number. What is one fourth of that number?
8) Divide nine hundred by five.
9) Halve thirty seven, give your answer in decimals.
10) What time is it half an hour after ten fifteen in the morning? Write your answer using a.m. or p.m.
11) Write zero point eight as a fraction, give your answer in the simplified form.
12) How many side does a pentagon have?
13) How many metres are there in two point seven kilometres?
14) The temperature was four degrees Celsius. It goes down by nine degrees Celsius. Write the new temperature.
15) Multiply $30 \%$ of three hundred by 7.
16) The length of the sides of a triangle are seven, eight and nine centimetres. Find its perimeter.
17) Divide seven hundred by thirty five?
18) A number multiplied by four equals two hundred and eighty. What is the number?
19) Write one square number in between fifteen and twenty.
20) Write two triangular numbers in between three and fifteen.
21) 
22) $\qquad$
23) 
24) $\qquad$
25) $\qquad$
26) $\qquad$
27) $\qquad$
28) $\qquad$
29) $\qquad$
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35) $\qquad$
36) $\qquad$
37) $\qquad$
38) $\qquad$
39) $\qquad$
40) $\qquad$

Answer the following questions, giving your answers in number form. Remember to add the correct units, where appropriate.

1) Subtract nought point nought seven from nought point three.
2) Three pens cost one pound fifty pence altogether. How much would seven pens cost?
3) Multiply eighty five by twenty.
4) What is five per cent of one hundred?
5) What time is it ten hours after eight pm?
6) Double one hundred and fifty and then double the answer.
7) Subtract twenty eight from fifty.
8) How many millimetres are there in three centimetres?
9) What is three quarters of forty four?
10) Peter chose a number. He halved the number then added ten to the result. His answer was thirty five. What was the number he started with?
11) Write all multiple of seven that is between hundred and hundred and fifty. There are 7 of them.
12) How many grams are there in two point seven kilograms?
13) Two metres of wire cost ninety pence. How much will three metres of wire cost?
14) Imagine a square based pyramid. How many vertices does it have?
15) Take away ninety five from one hundred and ten.
16) What is the next odd number after nine hundred and ninety nine?
17) Multiply seven by eight and then add fifty.
18) What is half of nine pounds? Give your answer in pounds
19) What is six multiplied by twenty then divided by four?
20) The perimeter of a square is one metre. How many centimetres long is each side?
21) 
22) $\qquad$
23) 
24) $\qquad$
25) $\qquad$
26) $\qquad$
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30) $\qquad$
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40) $\qquad$

## Exercise 2.1

Answer the following questions. Make sure to include the correct unit, where appropriate.

1) A bus driver calculates that she can travel 12.5 miles for every litre of petrol. How many miles can she travel with 32 litres?
2) There are 15 traffic cones on every 80 metres of motorway. How many cones are needed for 400 metres?
3) It takes 18 minutes for Basir to paint a wall in LEC. How many walls can he paint in 3 hours and 40 minutes?
4) Find the total weight of 15 parcels, if each weighs 12 kg .
5) Suku thinks of two numbers, the product of those two numbers gives an answer of 81 . When you minus them, the answer is 24 . What are the two numbers?
$\qquad$ , $\qquad$
6) A biscuit contains $5 \%$ fat. What weight of fat is there in a 80 grams biscuit?
7) Peter wants to buy a new pair trainers for $£ 65$ but he is $£ 8$ short. How much money does he have?
8) In a road survey 15 out of 60 vehicles were cars. What percentage is this?
9) The ratio of two rectangles is $4: 5$. The length of the first one is 32 cm . What is the length of the second one?
10) What is the total weight of $x$ books weighing $y$ grams each?
11) There are 50 people in a bus. If $x$ people get off, how many are left on the bus?
12) A piece of brass weighing 150 grams contains $20 \%$ copper. What is the weight of the copper?
13) I think of a number. When I add 4 to it the result is 12 . What was the number I thought of?
14) A number is doubled and then 10 is added to it. This gives me 40 . What is my number?
15) The area of a parallelogram is found by multiplying the base by the height. If the area is $24 \mathrm{~cm}^{2}$ and the base is 8 cm , what is the height?
16) One fourth of a number is 7 . What is the number?
$\qquad$
17) A path has been laid. It's length is 400 cm . What is this in metres?
18) The average of twelve numbers is 8 . What is the total of the twelve numbers?
19) The range of five numbers is 11 . Four of the five numbers are $3,5,7,12$. The smallest number is missing. What is it?
20) The mean of six numbers is 4 . What is the total of the six numbers?

Answer the following questions. Make sure to include the correct unit, where appropriate.

1) Peter is 48 years old. He is 6 years older than twice his son's age. Find the age of his son?
2) Maya, Lute and Aran are cousins. Maya's age is $\frac{1}{3}$ of Lute's and Aran is $\frac{1}{4}$ of Lute's age. If the sum of the age of the cousins is 38 , find the ages of each cousin.
$\qquad$
Maya =
Lute = Aran =
3) Laura is 5 years more than Luke. The sum of their ages is 29 . Find the age of Laura and Luke.
$\qquad$
Laura =
Luke = $\qquad$
4) Rose is 3 years younger than Tom. The ages are in the ratio of 2:3. Find their ages.
Rose $=$ $\qquad$

Tom $=$ $\qquad$
5) George is 8 years more than Christ and Poorna is 2 years younger than Christ. The sum of their ages is 60 . Find the age of George, Christ and Poorna.
$\qquad$
George $=$ Christ $=$ $\qquad$ Poorna $=$ $\qquad$
6) Abi is 10 years old. His age is 3 more than half the age of Gobi. Find the age of Gobi.
7) Mr Steven is 8 years more than twice the age of his son. If his son is 10 years old, how old is Mr Steven? Find the difference between their ages.

Mr Steven = $\qquad$ Difference = $\qquad$
8) Saru is 60 years old. Her age is 5 times the age of Peter. How old is Peter?
9) The sum of present age of Rishi and his age 7 years before is 43 . Find the present age of Rishi. What will be his age after 7 years?

## Present =

$\qquad$
After 7 years = $\qquad$
10) Peter is 6 years more than Rose and Rana is 3 years younger than Rose. The sum of their ages is 39 . Find their ages.
Peter = $\qquad$

Rana $=$ $\qquad$
Rose $=$ $\qquad$
11) Margret is 8 years more than Patel and Lily is 2 years younger than Patel. Their total age is 138 . Find their ages?
$\qquad$
Patel =
Margret = $\qquad$
Lily = $\qquad$
12) Mary is 8 years more than twice the age of her son. The age of her son is 12 . Find the age of the mother and the difference between their ages.

Mary = $\qquad$ Difference $=$ $\qquad$
13) Harry and Alan were born on consecutive years and on same date. Harry is younger. The sum of their ages is 11 . Find the age of the two brothers.

Alan = $\qquad$
Harry= $\qquad$
14) Andrew is 45 years old. He is 6 years older than thrice his son's age. Find the age of his son.
15) The ages of Sita and Rani are in the ratio of $4: 7$. The sum of their ages is 22 . Find the age of Sita and Rani.

Sita $=$ $\qquad$ Rani $=$ $\qquad$
16) The present ages of Mary and Jack are in the ratio of $1: 2$. Three years from now, the ages will be in the ratio of $3: 5$. Find the present age of Mary and Jack.

Mary = $\qquad$ Jack $=$ $\qquad$
17) At present Myra is 10 years younger than Mary. Five years from now, Mary's age will be 2 times the present age of Myra. Find the present age of Myra and Mary.

Myra = $\qquad$ Mary = $\qquad$
18) Sumo is 20 years old. His age is 4 times the age of Mary. Find the age of Mary.
19) Jenny's age is twice the age of Allen. Jenny is 46 . Find the age of Allen.
20) Rishi is 7 years older than Rohit. Rohit is 3 years older than Ranjan. Ranjan is 10 years now. Find the age of Rishi and Rohit.

Rishi $=$ $\qquad$ Rohit $=$ $\qquad$

Answer the following questions. Make sure to include the correct unit, where appropriate.

1) Use the bar chart to answer the following questions.

i) Who has got the highest mark in Maths?
ii) Who are the pupils that got the equal marks?
iii) Who has got the lowest in the class?
iv) Who got 40 marks in Maths?
v) If the pass mark is 45 , how many pupils from this class will pass in Maths?
vi) How many students failed in the test?
2) Meera and Jana were playing marbles. Meera had 22 marbles and Jana had 11. At the end of the game Mr Nat had confiscated 24 marbles but Meera managed to hide 6 marbles and Jana pocketed 3. Write the ratio of the marbles for Meera and Jana at the beginning and at the end.

Beginning: $\qquad$ End: $\qquad$
3) The shoe sizes of a class are $5,7,7,7,4,6,6,7,9,10,6,8,9,6,8,5,6$. What is the modal size?
4) The time (in minutes) taken by a student going to school at different occasions were: 54, $56,57,60,59,54,56,56,57,58,55,54,54,54,59,60,60,57,55,55$. What is the modal time?
5) Find the median of $2,5,4,4,6,7$ :
6) Find the median of $2,3,4,5,2,3,4$ :
7) In maths, ten students' marks were $72,72,74,75,79,72,72,73,74,76$. Find the median of the marks?
8) The weight of 9 boys in pounds were $70,72,70,69,62,60,59,55,56$. What is the median of these measurements?
9) The following table shows the number of washing detergent Peter has sold in the last week.

|  | 1 kg | 500 g | 250 g | Total |
| :---: | :---: | :---: | :---: | :---: |
| Powder |  | 4 |  | 12 |
| Liquid | 3 | 2 | 2 |  |
| Tablets | 2 | 5 |  |  |
| Total | 8 | 11 | 11 | 30 |

a) Complete the two way table.
b) How many 1 kg packets of detergent has he sold?
c) How many 250 g of tablets has he sold?
d) Which type of detergent do you think he sells the most of? Why?
10) Robert cycles to Mala's house. He stays there for a while, then rides back home. The graph below shows the journey.

a) How far is Mala's house?
b) What time does Robert arrive at Mala's house?
c) How long does he stay at Mala's house?
11) Peter, Mala and Mohan went to town by bus. This is what they paid for their journey.

|  | Bus ticket |
| :--- | :---: |
| Peter | $£ 1.50$ |
| Mala | $£ 0.85$ |
| Mohan | $£ 1.80$ |

a) How much more did Mohan pay than Mala?
b) Mala took another bus from town to visit her uncle. She pays $£ 0.85$ for this bus. How much has Mala paid altogether for her two buses she took?
12) The graph below shows the cost per minute for the phone calls made during the daytime and in the evenings.

Cost of calls during day and evening time

a) How much does it cost to make a 9 minute call in the daytime?
b) How much more does it cost to make a 6 minute call in the daytime than in the evening?
13) Mr Krish buys paving slabs to go around his pond.

| 1.65 each <br> $\square$ | Square slabs <br> $50 \mathrm{~cm} \times 50 \mathrm{~cm}$ |
| :---: | :---: |
| £2.60 each | Rectangle slabs <br> $100 \mathrm{~cm} \times 50 \mathrm{~cm}$ |
| $\square$ |  |



What is the total cost of the slabs that he needs to buy? $\qquad$
14) This table shows the weight of some fruits and vegetables. Complete the table.

|  | Grams /g | Kilograms /kg |
| :--- | :---: | :---: |
| Potatoes | 2500 | 2.5 |
| Apples |  | 1.6 |
| Grapes | 350 |  |
| Ginger |  | 0.06 |

15) Veena does a survey of children's favourite football teams. The data she collected from the year 5 class is shown in the bar-chart below.

i) How many more children in year 5 prefer Man Utd than East ham? $\qquad$
ii) Which is the modal team in the year 5 class?
iii) Which is the least favourite team in the class?

Answer the following questions. Make sure to include the correct unit, where appropriate.

1) My new speakers were $£ 150$ but I also had to pay $20 \%$ VAT, how much did I pay for my new speakers?
2) My shoes were only $£ 50$, but I also had to pay $20 \%$ VAT. What was my total?
3) I purchased a scooter for 290 pounds, but I was charged an additional $5 \%$ for delivery. What was my total?
4) The new book was only $£ 20$, but it was another $60 \%$ if the author signed it. What will my book cost with an author's signature?
5) The brakes for my old bike were $£ 125$, but there’s another $40 \%$ charge for installation. What will my total cost be?
6) My new laptop was $£ 850$ plus $20 \%$ tax. What will be the total cost?
7) My new golf stick costs $£ 140$, but it was a last year model, so I got a $60 \%$ discount. What will be the new cost after the discount?
8) Chocolate bars costing $£ 4.50$ are now on sale for $20 \%$ off. What is the price of the chocolate bars now?
9) My new car radio was $£ 179.95$ plus $20 \%$ for installation. How much did I pay?
10) Dinner was $£ 30$ but I left a $25 \%$ tip, what did I end up paying?
11) The $£ 3.50$ chocolate bar that I purchased was on sale for $25 \%$ off, what did I pay for it?
12) I got $40 \%$ off when I purchased a set of golf balls regularly priced at $£ 19.50$. How much did I pay?
13) My new headset was $£ 100$ but it was on sale for $40 \%$ off. What will I have to pay for it?
14) Our meal was $£ 60$ but we got $20 \%$ off because it came late. How much did I pay for the meal?
15) My new jumper was $£ 49.99$ but I got $30 \%$ off. What did I pay?
16) $£ 50$ winter jackets were on sale, for $30 \%$ off, how much are they now?
17) My cell phone cost me $£ 149.50$ to fix it but the person gave me $30 \%$ off, how much did it cost me?
18) I didn’t have to pay $£ 119.95$ for my new wallet because it was on sale for $35 \%$ off, so how much did I pay?
19) The sales man gave me $20 \%$ off, for my new laptop regularly priced at 429.95 pounds. What did I pay for it?
20) It usually costs $£ 16.50$ to go to the show, but if you go on Tuesdays, there’s a $40 \%$ discount, what is the cost of a show on Tuesdays?
21) Our take away dinner was $£ 75$, but we got $20 \%$ off because we picked it up. What did our meal end up costing us?
22) $£ 40.50$ video games were on sale for $20 \%$ off, how much are they now?
23) I got $30 \%$ off when I purchased a rare comic book regularly priced at $£ 24.50$. How much did I pay?
24) My new book costs 45 pounds with the $10 \%$ off. What is the original cost of my book?
25) We bought a dish washer with $20 \%$ off. We paid 650 pounds to the shop. What is the original cost of the dish washer?
26) The Tumble dryer is on sale for $25 \%$ off. The original price is 450 pounds. What is the sale price?
27) We always get $10 \%$ profit on our sales. This month our sales is 1550 pounds. How much is our profit?
28) We sell books at the rate of $£ 4.50$ each. We had 200 books with us. We made $10 \%$ on our sales amount. How much was the profit?

Answer the following questions. Make sure to include the correct unit, where appropriate.

1) For every 4 cars in a parking area there are 3 vans. What is the ratio of cars to vans in the parking lot?
2) For every 4 girls on a soft ball team there are 10 boys. What is the ratio of boys to girls?
3) In a bag of candy for every 5 chocolate pieces there are 10 sugar pieces. What is the ratio of chocolate pieces to sugar pieces? Give your answer in a simplified form.
4) In an ice cream shop for every 5 vanilla cones sold, 2 strawberry ice cream cones were sold. What is the ratio of strawberry to vanilla?
5) The ratio of boys to girls in a class room is 2 to 3 . If the total of students in that classroom is 55 , then how many boys and girls are there?

## Boys:

$\qquad$ Girls: $\qquad$
6) The ratio of blue bags to red bags is 4 to 5 . If there is a total of 20 red bags, then how many blue bags are there?
7) The ratio of blue marbles to red marbles is 3 to 5 . If there is a total of 88 marbles, then how many blue marbles and red marbles are there?

Blue: $\qquad$ Red: $\qquad$
8) The ratio of red ribbons to green ribbons is 2 to 5 . If there is a total of 28 red ribbons, then how many greens ribbons are there?
9) There are 25 boys and 35 girls are in a classroom. What is the ratio of girls to boys in the classroom? Give your answers in simplified form.
10) The ratio of coins to notes in a bag is 5 to 7 . If there is a total of 35 notes, then how many coins are there?
11) Peter went to a restaurant. Peter loves chicken fries. For every 20 chicken fries he uses 3 packets of ketchup. One evening Peter ate 80 chicken fries. How many ketchup packets did he use?
12) In a card packet Raj has 4 kings and Rubi has 5 clubs. What is the ratio of clubs to king cards?
13) Sophi can run 3.6 miles for every 1.9 miles that Chitra ran. If Chitra ran 28.5 miles, how far did Sophi run?
14) Bob takes 10 minutes to do 20 questions. How long will he take to do 37 questions?
15) The ratio of teachers to students in a school is 2 to 5 . If the total number of people is 672 , how many teachers and students are there?

Teachers: $\qquad$ Students: $\qquad$
16) In an hour Harry types 5 paragraphs and Mickey types 9 paragraphs. If Mickey types 22 and a half paragraphs, how many paragraphs would Harry type and how long would it take them?

Paragraph:
Length:
17) In a florist, for every white rose there are three red roses. If the total number of roses is 420 , how many white and red roses are there?

White: $\qquad$ Red: $\qquad$
18) The rate of students passing and failing in an English class is $12: 1$. In a class of 39, how many students will pass and how many will fail?

Pass: $\qquad$ Fail: $\qquad$
19) A bag has red, blue and green counters in the ratio of $2: 1: 4$, respectively. If there are 28 green counters, how many red and blue counters will there be in the bag?

Red: $\qquad$ Blue: $\qquad$
20) In a flower park, the ratio of the area of flowers to the ratio of grass is $8: 6$. If the total area of the flower park is $126000 \mathrm{~cm}^{2}$. What is the area of flowers and the area of grass?

Flowers: $\qquad$

## Grass:

1) Rani has 64 sweets in a bag. She keeps one quarter of them for her brother and shares the rest with her friends. How many sweets will she have to share amongst her friends?
2) 60 people watched the football game last night. 80 people watched tennis. What is the fraction of football fans out of the total people?
3) Rohan buys 25 books on Monday and 15 on Tuesday, on Wednesday he gives one eighth of his books to Mala. How many books does he have left?
4) There are 8 shelves in a cupboard and in each of them there are 90 books.
a) How many books are there altogether?
b) If one quarter of these are fiction, how many non fictional books are there?
5) Aran bought a packet of 80 biscuits on Sunday. On Sunday he ate one eighth of them. How many biscuits did he have left?
6) There are 6 shelves in a book cupboard and in each of them there are 36 books.
a) How many books are there altogether?
b) One quarter of these are maths books, find the number of maths books in the cupboard?
7) Of the 200 children in 11+ class, two fifths have calculators. How many children do not have a calculator?
8) The white bin bags have been circulated to 400 households. Only three fifth of these were used to put unwanted papers. Others were wasted. How many of them were wasted?
9) In a sale a video camera is reduced by one quarter. What is the sale price if the original price was $£ 820$ ?
10) You have 15 buns and you want to give two third of them to a friend and keep one third for yourself. How many buns would your friends get?
11) A baker is making cakes for a big party. She uses one - third of a cup of oil for each cake. How many cakes can she make if she has a bottle of oil that contains 15 cups in it?
12) LEC has 150 students, one third of them are $11+$ students. How many students are there for the other classes?
13) Mrs Nat's class is making dresses. Each dress uses two third of a yard of fabric. How many dresses can they make out of 24 yards of fabric?
14) Of the 120 children in $11+$ class, nine tenth of the children have passed. How many children passed?
15) In a shop, they displayed one third off from the original price. Suraj spend $£ 40$ on a shirt. What is the original price of the shirt?
16) In our book shelves, there are 440 books that are arranged by subject order. One quarter of them are physics book. Half of them are maths books. The rest are chemistry books. How many chemistry books are there?
17) The area of a hall is 240 square meters. One quarter of the area is used for the Tamil school and the balance is used for cookery classes. How much of the area is used for cookery classes?
18) In our maths class one quarter of the students are clever, and three quarters of them are average students. The average students are 24 . How many clever students are there?
19) In a football team one third of them were Asian. There are 5 Asian players. How many players are in the team?
20) 64 cars passed Luxmi Education Centre at 5 pm, of them three eighth were BMW cars. How many BMW cars passed Luxmi Education Centre at 5pm?

Circle the correct answer for the following questions.

1) Look at this series. $7,10,8,11,9,12 \ldots$ What number should come next?
a) 7
b) 10
c) $\quad 12$
d) 13
2) $36,34,30,28,24 \ldots$ What number is next in this series?
a) 20
b) 23
c) 22
d) 26
3) $53,53,40,40,27,27 \ldots$ What is the next number in this series?
a) 12
b) 14
c) 27
d) 53
4) The total of Sarugi, Kajan and Peter's age is 80 years. What was their total ages three years ago?
a) 71
b) 72
c) 74
d) 77
5) A pineapple costs $£ 7$. A watermelon costs $£ 5$ each. Peter spends $£ 38$ on these fruits. How many pineapples did Peter buy?
a) 2
b) 3
c) 4
d) data is not enough
6) $A$ is 3 years older than $B$ and 3 years younger than $C$, while $B$ and $D$ are twins. How many years older is $C$ to $D$ ?
a) 2
b) 5
c) 6
d) 12
7) In a garden there are 10 rows and 12 columns of mango trees. The distance between each tree is 2 metres and a distance of 1 metre is left from all sides of the boundary of the garden. The length of the garden is:
a) 28 m
b) $22 m$
c) 24 m
d) 26 m
8) A tailor had a number of shirt pieces to cut from a roll of fabric. He cuts 10 equal length pieces from each roll. He cuts them at a rate of 45 cuts per minute. How many rolls would be cut in 24 minutes?
a) 32 rolls
b) 120 rolls
c) 54 rolls
d) 102 rolls
9) There are cows and hens in a zoo. By counting heads there are 80. The number of their legs is 200 . How many hens are there?
a) 20
b) 30
c) 50
d) 60
10) Peter has $£ 3$ more than Jack, but Jack wins a game and trebles so that he now has $£ 3$ more than the original amount of money. They had $£ 15$ at the end. How much money did Peter and Jack have between them before Jack won?
a) $£ 9$
b) 11
c) 13
d) 15
11) A is three times as old as B. C was twice as old as A four years ago. In four years time, A will be 31 . What are the present ages of $B$ and $C$ ?
a) $9 \& 46$
b) $9 \& 50$
c) $10 \& 46$
d) $10 \& 50$
12) What is the smallest number of ducks that could swim in this formation: two ducks in front of a duck, two ducks behind a duck and a duck between two ducks?
a) 3
b) 5
c) 7
d) 9
13) A certain number of horses and an equal number of men are going somewhere. Half of the owners are on their horses' back while the remaining ones are walking along leading their horses. If the number of legs walking on the ground is 70 , how many horses are there?
a) 10
b) 12
c) 14
d) 16
14) The number of boys in a class is three times the number of girls. Which one of the following numbers cannot represent the total number of children in the class?
a) 48
b) 44
c) 42
d) 40
15) What is the total number of digits used for numbering the pages of a book having 366 pages?
a) 732
b) 990
c) 1098
d) 1305

OUR PUBLICATIONS (LEC)

| NO | Year Group | NAME | STATUS | AUTHOR |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | English Classwork Book | Published | R. Myra |
| 2 | 2 | English Homework Book | Published | R. Myra |
| 3 | 3 | Mathematics Classwork Book | Published | M. Nat |
| 4 | 3 | Mathematics Homework Book | Published | M. Nat |
| 5 | 3 | English Book 1 | Published | J. Suki |
| 6 | 3 | English Book 2 | Published | J. Suki |
| 7 | 4 | Mathematics Classwork Book | Published | M. Nat |
| 8 | 4 | Mathematics Homework Book | Published | M. Nat |
| 9 | 4 | Verbal Reasoning Book 1 | Published | M. Nat |
| 10 | 4 | Non-Verbal Reasoning | Published | M. Nat |
| 11 | 5 | Mathematics Book 1 | Published | M. Nat |
| 12 | 5 | Mathematics Book 2 | Published | M. Nat |
| 13 | 5 | Mathematics Book 3 | Published | M. Nat |
| 14 | 5 | Mathematics Book 4 | Published | M. Nat |
| 15 | 5 | Mathematics Book 5 | Published | M. Nat |
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| 17 | 5 | Verbal Reasoning Book 2 | Published | M. Nat |
| 18 | 5 | Verbal Reasoning GLS Book | Published | M. Nat |
| 19 | 5 | Comprehension Book 1 | Published | R. Myra |
| 20 | 5 | Non Verbal Reasoning Book 1 | Published | M. Nat |
| 21 | 5 | Non Verbal Reasoning Book 2 | Published | M. Nat |
| 22 | 6 | Mathematics Classwork Book | Published | M. Nat |
| 23 | 6 | Mathematics Arithmetic Book | Published | M. Nat |
| 24 | 6 | Maths Practice Paper Book | Published | M. Nat |
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