

# Grade 06 Unit 07

## Maths

### Course Outline

◉ Decimals

◉ Fractions

# MAT

(Monthly Achievement Tests)

Short Code: 447307

Test ID: NMM06U070



### Guide Lines

1. Each set consists of:

50 | Warm-up/Foundation Questions

30 | Regular Questions

20 | Thinking Ability Questions

2. The time allocation and instructions regarding the questions are printed clearly in the beginning of each question types. The answers should be written or tick marked as per the instructions given. It is suggested to use pencil initially, so as to enable you to reuse the practice papers.
3. **According to the new pattern of CBSE these practice papers will be very useful especially for syllabus related Quiz, Debates, Visuals related checking and Orals etc.,**
4. After marking the answers, the scores of students can be checked and for marks obtained guidelines are given along with the question solving instructions. Follow those instructions and if, you are fully satisfied with your performance then check for your expected grades as per the CBSE guidelines as given on the back of each set.
5. Remember that this is only a guideline not the finally worked out result. You can further improve your performance by increase your practice.
6. For your convenience please follow following essential examiner's advices:
  - a. Answer all the questions
  - b. Read all the Options carefully
  - c. Understand and use correct scientific language in your responses.

We from  wish skillful learning for your bright future.

## Before going for the test, look at least :

1. First of all go through the syllabus of the test according to the **Course Outline** provided at the front page of each MAT.
2. After going through the syllabus once or twice or even more time as per your satisfaction, first of all do the Warm-up questions. If you score A+ grade in those 50 questions go to the next level otherwise go through the chapter again.
3. The box for **Specific Information** is very useful as it adds to your concept building. Try to fill specific information in the proper way so that you will get the maximum benefit of it.
4. **Let's Chat** portion will help you to prepare for oral assessment. Through this you can increase your capacity to interact on a particular topic related to your syllabus.
5. The **Extra Diet** portion is also there to enhance your knowledge through visualization of concept. This portion provides you added knowledge on various related concepts.
6. The information related to time factor is there to enhance your time management skills.
7. From the examiners point of view it is always advised to use Pencil for initial efforts. The use of pen is fruitful only when the final effort comes.

## Examiner's Tips:

- ☞ Read the question carefully. Make sure you understand exactly what is required.
- ☞ If you find that you are unable to do a part of a question, do not give up. The next part may be easier and may provide a clue to what you might have done in the part you found difficult.
- ☞ Note the number of marks per question as guide to the depth of response needed.
- ☞ Underline or note the key words that tell you what is required.
- ☞ Underline or note data as you read the question.
- ☞ Structure your answer carefully.
- ☞ Show all steps in calculations. Include equations you use and show the substitution of data. remember to work according to units given.
- ☞ Make sure that your answers contain suitable significant figures (wherever necessary) and must include units in numericals.
- ☞ Draw diagrams and graphs carefully.
- ☞ Read data from graphs carefully; note scales and prefixes on axes.
- ☞ Keep your eye on the clock but don't panic.
- ☞ If you have time at the end, use it. Check that your descriptions and explanations make sense. Consider whether there is anything you could add to an explanation or description. Repeat calculations to ensure that you have not made a mistake.

To enlighten your fundamental/basic topic knowledge.

- A+. If you score 45 or above marks, move to the next section confidently.
- A. If you score between 40 and 45 marks, it is satisfactory. Bit more knowledge will bring excellent result.
- B. If you score below 40, kindly go through the topic more seriously.

## Section A (50 marks)

Time given – 50 minutes + 5 minutes for revision

Questions 1 to 50 carry 1 mark each.

For each question four options are given. One of them is the correct answer. Make your choice and write its name (a, b, c or d) in the answer box provided.

1. \_\_\_\_\_ is the smallest number.

(a) 0.3 (b) 0.24  
(c) 0.042 (d) 0.101

T – 1 min  
S – Decimals

Ans.

2. Half a dozen packets of potato chips cost Rs 5.40.

With Rs 9, Sandy can buy \_\_\_\_\_ packets of the potato chips.

(a) 7 (b) 8  
(c) 9 (d) 10

T – 1 min  
S – Decimals

Ans.

3. Nina is 17 cm taller than her brother. Her height is 1.53 m.

Her brother's height is \_\_\_\_\_.

(a) 1.7 m (b) 1.8 m  
(c) 1.36 m (d) 1.44 m

T – 1 min  
S – Decimals

Ans.

4. 36 min expressed as a fraction of 4 hr is \_\_\_\_\_.

(a) 0.25 hr (b) 0.15 hr  
(c) 0.35 hr (d) 0.05 hr

T – 1 min  
S – Decimals

Ans.

5. \_\_\_\_\_ is the smallest number.

(a) .01 (b) .10  
(c) 0.001 (d) .101

T – 1 min  
S – Decimal

Ans.

6. Neelam is 17cm smaller than her brother. Her height is 1.73m. Her brother's height is \_\_\_\_\_ .

(a) 1.7cm (b) 1.90m  
(c) 1.56m (d) 1.44m

T – 1 min  
S – Decimals

Ans.

7.  $5 - 1\frac{3}{2} = \square$

(a)  $\frac{3}{2}$  (b)  $\frac{5}{2}$   
(c)  $\frac{3}{5}$  (d)  $\frac{7}{2}$

T – 1 min  
S – Fractions

Ans.

8. Joe's weight is about 35 kg.  
His actual weight could be \_\_\_\_\_ .

(a) 34.4 kg (b) 35.4 kg  
(c) 35.5 kg (d) 35.7 kg

T – 1 min  
S – Decimals

Ans.

9. 4 children share 6 leaves of bread equally. Each child gets \_\_\_\_\_ leaves.

(a) 2 (b)  $1\frac{1}{2}$   
(c)  $1\frac{1}{3}$  (d)  $1\frac{3}{4}$

T – 1 min  
S – Fractions

Ans.

10. Boon's height is 1.53 m, 6 cm shorter than Meng.  
What is the average height of Boon and Meng?

(a) 1.56 m (b) 1.59 m  
(c) 3.06 (d) 3.12

T – 1 min  
S – Fractions

Ans.

11. The table below shows the parking charges at a car park.

Parking Rates	
1st hour	Rs 1.00
Additional $\frac{1}{2}$ hour or part thereof	Rs 0.60

Mr Gopal left the car park at 4.10 pm and paid Rs 5.80 for parking his van at the car park.  
At what time was he most likely to have parked his van at the car park?

(a) 11 am (b) 12 noon  
(c) 10.30 am (d) 12.30 pm

T – 1 min  
S – Fractions

Ans.

12. 1548.3 divided by 1000 gives the answer \_\_\_\_\_.  
 (a) 1.5483 (b) 15.483  
 (c) 154.83 (d) 1548300  
 T – 1 min  
 S – Decimals  
 Ans.
13. Rohani has 6 five-cent coins, 7 twenty-cent coins and 9 fifty-cent coins. How much money does she have altogether?  
 (a) Rs. 4.75 (b) Rs. 5.95  
 (c) Rs. 6.20 (d) Rs. 11.05  
 T – 1 min  
 S – Decimals  
 Ans.
14. Ibrahim went for violin lesson after dinner. He left home at 7.15 pm and returned 2 hr 48 min later. At what time did he return home?  
 (a) 5.07 pm (b) 9.15 pm  
 (c) 9.48 pm (d) 10.03 pm  
 T – 1 min  
 S – Fractions  
 Ans.
15. 1442.3 divided by 100 gives the \_\_\_\_\_.  
 (a) 1442.3 (b) 144.23  
 (c) 14.423 (d) 1442300  
 T – 1 min  
 S – Decimal  
 Ans.
16. 168 cm = \_\_\_\_\_ m.  
 (a) 1.68 m (b) 1680 m  
 (c) 16.8 m (d) 168 m  
 T – 1 min  
 S – Decimal  
 Ans.
17. Pankaj cut an apple into 5 equal pieces. He ate  $2\frac{1}{2}$  pieces. What fraction of the apple was left?  
 (a)  $\frac{1}{2}$  (b)  $\frac{3}{2}$   
 (c)  $\frac{5}{2}$  (d)  $\frac{2}{5}$   
 T – 1 min  
 S – Fractions  
 Ans.
18. Sudha has 5 fifty-paise coins, 8 twenty-five paise coins and 10 twenty paise coins. How much money does she have altogether?  
 (a) Rs. 5.50 (b) Rs. 7.25  
 (c) Rs. 6.50 (d) Rs. 8  
 T – 1 min  
 S – Decimals  
 Ans.

19. Ishika went for Maths tuition after breakfast. She left home at 9.45 am and returned 2 hr 15 min later. At what time did she return home?

(a) 12 pm

(b) 11.45 am

(c) 12.15 pm

(d) 12 am

T – 1 min

S – Decimals

Ans.

20. At 8.20 am, Rajat started driving from his house to his office. His office was 70 km away from his house. He arrived at his office at 9.10 am. Find his speed.

(a) 70 km/h

(b) 72 km/h

(c) 84 km/h

(d) 98 km/h

T – 1 min

S – Decimals

Ans.

21. The fractions where numerator is bigger than the denominator are called improper fractions.

T – 1 min

S – Fractions

Ans.

22.  $\frac{p}{q}$  where p is called denominator.

T – 1 min

S – Fractions

Ans.

23.  $5\frac{3}{4} = \frac{22}{4}$

T – 1 min

S – Fractions

Ans.

24. The simple form of  $\frac{28}{77} = \frac{4}{11}$

T – 1 min

S – Fractions

Ans.

25. Fraction with the same denominator are called like fractions.

T – 1 min

S – Fractions

Ans.

26. A fraction is said to be in the simplest form if its numerator is equal to denominator.

T – 1 min

S – Fractions

Ans.

27.  $0.04 = \frac{1}{25}$

T – 1 min  
S – Fractions

Ans.

28.  $0.9 > 0.07$

T – 1 min  
S – Fractions

Ans.

29. Every fraction with denominator 100 can be written in decimal rotation and vice versa.

T – 1 min  
S – Fractions

Ans.

30. All decimals can also be written as fractions.

T – 1 min  
S – Fractions

Ans.

**For questions 31 to 32, write each improper fraction as a decimal.**

31.  $\frac{712}{100} =$

T – 1 min  
S – Decimals

Ans.

32.  $\frac{9033}{1000} =$

T – 1 min  
S – Decimals

Ans.

**For questions 33 to 35, write each mixed number as a decimal.**

33.  $3\frac{9}{10} =$

T – 1 min  
S – Decimals

Ans.

34.  $5\frac{27}{100} =$

T – 1 min  
S – Decimals

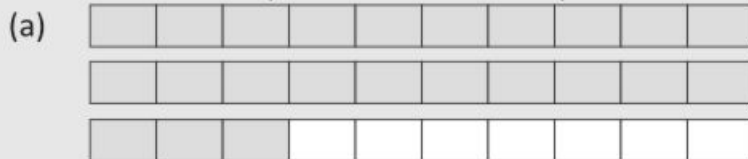
Ans.

35.  $7\frac{8}{1000} =$

T – 1 min  
S – Decimals

Ans.

36. Write the shaded parts of each set of pictures as a decimal.



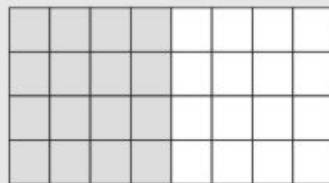
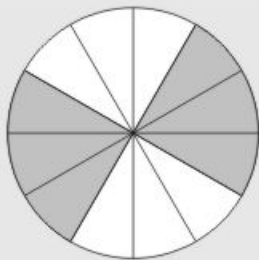
T – 1 min  
S – Decimals



Ans.

**For questions 37 and 38, write the shaded parts of each picture as a decimal.**

37. (a)



T – 1 min  
S – Decimals

Ans.



38.

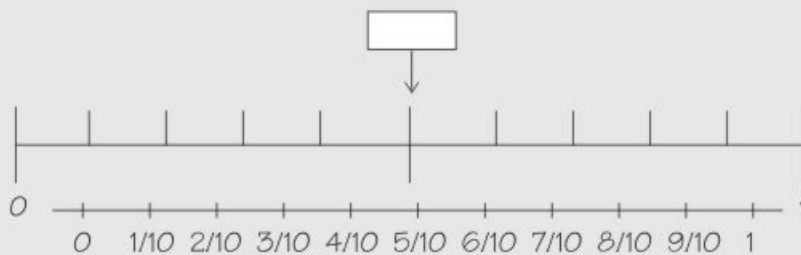
Rs 100	Rs 100	Rs 100	Rs 100	Rs 100
Rs 100	Rs 100	Rs 100	Rs 100	Rs 100

T – 1 min  
S – Decimals

Ans. 

**For questions 39 and 40, write the decimal numbers:**

39. (a)



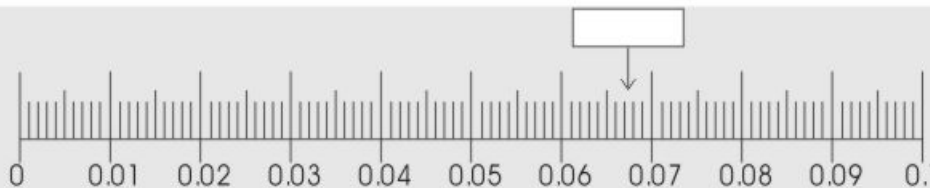
(b)



T – 1 min  
S – Decimals

Ans. 

40.



T – 1 min  
S – Decimals

Ans.

*For questions 41 to 43, write each fraction as a decimal number.*

41. (a)  $\frac{8}{10} =$

T – 1 min  
S – Decimals

(b)  $\frac{3}{100} =$

Ans.

42. (a)  $\frac{55}{100} =$

T – 1 min  
S – Decimals

(b)  $\frac{151}{1000} =$

Ans.

43. (a)  $\frac{89}{1000} =$

T – 1 min  
S – Decimals

(b)  $\frac{6}{1000} =$

Ans.

44.  $2.445 = 2 + \frac{4}{10} + \frac{4}{100} + \frac{5}{1000}$

T – 1 min  
S – Fractions

Ans.

45.  $\frac{1}{4} = \underline{\hspace{2cm}}.$

T – 1 min  
S – Fractions

Ans.

46.  $8 - 2\frac{1}{3} = \underline{\hspace{2cm}}$

T – 1 min  
S – Subtraction

Ans.

**Fill in the blanks.**

47.  $1.873 = 1 + \frac{873}{\hspace{1cm}}$

T – 1 min  
S – Decimals

Ans.

48. Numbers written in decimal form are called           .

T – 1 min  
S – Decimals

Ans.

49.  $0.1 \times 0.1 \times 0.1 = \underline{\hspace{2cm}}$

T – 1 min  
S – Decimals

Ans.

50.  $\frac{-3}{8} = \frac{-3 \times 2}{8 \times 2} = \underline{\hspace{2cm}}$

T – 1 min  
S – Fractions

Ans.

**30**

## Regular Questions

Opening  
Window

To enlighten your regular knowledge of topic. If you score more than 55 marks here, you have achieved this level brilliantly. Move to the next level of test papers.

**Section B (60 marks)****Time given – 45 minutes + 5 minutes for revision****Questions 51 to 80 carry 2 marks each.**

51. Find a decimal number, with 1 decimal place, which is greater than  $\frac{3}{5}$  but smaller than  $\frac{3}{4}$ .

T – 1 min  
S – Decimals

Ans.

52. In 62.783, what is the value of Digit 8 as a fraction in its simplest form?

T – 1 min  
S – Decimals

Ans.

53.  $3\frac{2}{5} + \frac{1}{3}$

T – 1 min  
S – Fractions

Ans.

54. Pooja spent for pen Rs. 10.50 for buying a pen and Rs. 3.75 for one pencil. How much money did she spend?

T – 1 min  
S – Decimals

Ans.

55. In 72.821, what is the value of 1 as a fraction in its simplest form?

T – 1 min  
S – Decimals

Ans.

56. Find the decimal number, with 1 decimal place which is greater than  $\frac{4}{7}$  but smaller than  $\frac{4}{5}$ .


T – 1 min  
S – Decimals

Ans.

57.  $6\frac{1}{5} + 7\frac{3}{2} =$






T – 1 min  
S – Fractions

Ans.

For questions 58 and 59, count the number of  then write the decimal represented by each table of place values.










58.

(a)

Ones	Tenths
	    

T – 1 min  
S – Decimals








(b)

Ones	Tenths
  	     

Ans.









59.

(a)

Ones	Tenths	Hundredths
		       

T – 1 min  
S – Decimals

(b)

Ones	Tenths	Hundredths
	     	     

Ans.

For questions 60 to 62, express each fraction as a decimal.

60.

(a)  $\frac{1}{4} =$

(b)  $\frac{8}{5} =$

T – 1 min  
S – Decimals

Ans.

61. (a)  $2\frac{3}{4} =$

(b)  $8\frac{4}{5} =$

T – 1 min  
S – Decimals

Ans.

62. (a)  $\frac{3}{20} =$

(b)  $9\frac{23}{50} =$

T – 1 min  
S – Decimals

Ans.

**Add:**

63.  $7.7 + 4.4 =$

T – 1 min  
S – Decimals

Ans.

64.  $0.47 + 0.08 =$

T – 1 min  
S – Decimals

Ans.

65.  $8.46 + 3.55 =$

T – 1 min  
S – Decimals

Ans.

### Subtract

66.  $0.7 - 0.2 =$

T – 2 min  
S – Decimals

Ans.

67.  $5.1 - 0.5 =$

T – 2 min  
S – Decimals

Ans.

68. Estimate the value of the difference between Rs. 5.76 and Rs. 54.51 by first rounding off to nearest rupees.

T – 2 min  
S – Decimals

Ans.

69. Estimate the value of the difference between 90.11 kg and 2.681 kg by first rounding off each mass to the nearest kilogram.

T – 2 min  
S – Decimals

Ans.



70. Estimate the value of the difference between Rs 9.42 and Rs 4.56 by first rounding off each amount to the nearest tenth rupees.

T – 2 min  
S – Decimals

Ans.

71. Estimate the value of the sum of 8.56 L and 4.74 L by first rounding off each volume to 1 decimal place.

T – 2 min  
S – Decimals

Ans.

72. Estimate the value of the product of 33.88 km and 4 by first rounding off the distance to the nearest kilometre.

T – 2 min  
S – Decimals

Ans.

73. Find the value of  $3 \div 8$  corrected to the nearest hundredth.

T – 2 min  
S – Decimals

Ans.

74. What is the value of  $7 \div 4$  corrected to 1 decimal place?

T – 2 min  
S – Decimals

Ans.

75. Arrange the numbers in ascending order.

0.9

0.009

0.99

0.09

0.999

T – 2 min  
S – Decimals

Ans.

76. Arrange the numbers in descending order.

30.03

0.033

0.303

3.003

0.330

T – 2 min  
S – Decimals

Ans.

77. Find the difference between the values of digit 3 and digit 9 in 2.398.

T – 2 min  
S – Decimals

Ans.

78. Subtract the smallest value of digit 7 from the greatest value of digit 7 in 0.777.

T	– 2 min
S	– Decimals

Ans.

79. Find the sum of values of digit 0 in 2.001.

T	– 2 min
S	– Decimals

Ans.

80. Put '+' and '=' in the circles to get the correct number statement:

1.34      7.82      9.16

T	– 2 min
S	– Decimals

Ans.

To enlighten your regular knowledge of topic. If you score more than 50 marks here, you have achieved this level brilliantly. Move to the next level of test papers.

## Section C (60 marks)

Time given – 45 minutes + 5 minutes for revision

81. The mass of box A is 4.135 kg. The mass of box B is 1.348 kg. What is the difference between mass of box A and mass of B?

T – 2 min  
S – Decimals

Ans. 

82. Find the difference between the sum of 5.87 and 4.25, and the sum of 3.02 and 1.22.

T – 2 min  
S – Decimals

Ans. 

83. The table below shows the parking charges at a car park.

First half hour	Rs. 1.20
Every additional hour a part thereof	Rs. 1.50

Mr Quek parked his car at the car park from 11.10 pm to 3.35 pm.

How much did he have to pay for parking?

T – 2 min  
S – Decimals

Ans.

84. One fourth of a herd of a deer has gone to the forest. One third of total number are grazing in a field and remaining 15 are drinking water on the bank of river. Find the total number of deer.

T – 2 min  
S – Fraction

Ans.

85. Ravi has Rs 35.75. He spend Rs 15.75 at one shop. How much money does Ravi have?

T – 2 min  
S – Decimals

Ans.

86. Round off each numbers to the nearest whole number.  
(a) 105.95                      (b) 27.001

T – 2 min  
S – Decimals

Ans.

87. Write each fraction as a decimal.

(a)  $\frac{25}{1000}$

(b)  $\frac{7}{10}$

T – 2 min  
S – Decimals

Ans.

88. Write each mixed number as a decimal.

(a)  $3\frac{1}{2}$

(b)  $20\frac{1}{5}$

T – 2 min  
S – Decimals

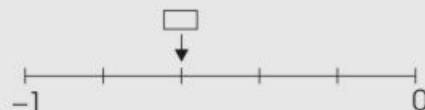
Ans.

89. Write decimal number.

(a)



(b)



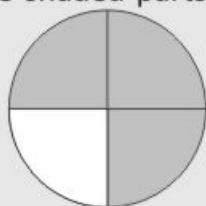
T – 2 min

S – Decimals

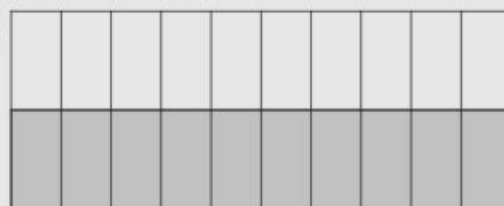
Ans.

90. Write the shaded parts of each picture as a decimal.

(a)



(b)



T – 2 min

S – Decimals

Ans.

91. Expand 2.0235

T – 2 min

S – Decimals

Ans.

92.  $101.256 = 101 + \frac{2}{10} + \frac{\quad}{100} + \frac{6}{\quad}$

T – 2 min

S – Decimals

Ans.

93. Find  $3.45 \text{ kg} + 4.23 \text{ kg} + 5.61 \text{ kg}$

T – 2 min

S – Decimals

Ans.

94. Find  $29.52 - 11.78$

T – 2 min  
S – Decimals

Ans.

95.  $1.25 \div 5$

T – 2 min  
S – Decimals

Ans.

96.  $0.007 \div 7$

T – 3 min  
S – Decimals

Ans.

97. Arrange numbers in descending order.  
40.5, 4.05, 0.045, 0.45, 0.0045

T – 3 min  
S – Decimals

Ans.

98. Verify  $(1.22 + 1.33) + 1.24 = 1.22 + (1.33 + 1.24)$

T – 3 min  
S – Decimals

Ans.

99. Verify  $(13 \times 14) \times 12 = 13 \times (14 \times 12)$

T – 3 min  
S – Decimals

Ans.

100. Subtract 0.79 from the sum of 0.687 and 3.729.

T – 3 min  
S – Decimals

Ans.

# Tools at a glance

**Opening Window** with instructions for your potential analysis and guideline to improve your performance.

**Opening Window**

**Let's Chat**, the feature with suggestive topics for discussion so as to improve your capacity to debate on various topics.

T — .....  
S — .....

Box with time break-up of questions (T) and its concept (S, i.e., subject)



Let's Chat

**Brain Teasers**



**Brain Teasers** i.e., Questions with difference to make the concepts of students crystal clear. These are the questions with higher difficulty levels to check the grip of the students over the concepts.

**Extra Diet**, the web link, the notation: [www.\\_\\_\\_\\_\\_](#) to provide additional information regarding the concept for more clarity of thoughts.



Extra Diet

## CBSE GRADING PATTERN

As the new pattern includes **CCE** (Continuous and Comprehensive Evaluation) which will be run in two terms i.e., from April to September and October to March. Thus the school will conduct four **Formative** and two **Summative** Assessments.

However, the most generalised version of grades is given below:

MARKS	PERCENTAGE	GRADE	GRADE POINT	CATEGORY
91 to 100		A1	10	Exceptional
81 to 90		A2	9	Excellent
71 to 80		B1	8	Very Good
61 to 70		B2	7	Good
51 to 60		C1	6	Ordinary
41 to 50		C2	5	Average
33 to 40		D	4	Below Average
21 to 32		E1	3	Improvement Needed
Below 20		E2	Below 2	Unsatisfactory