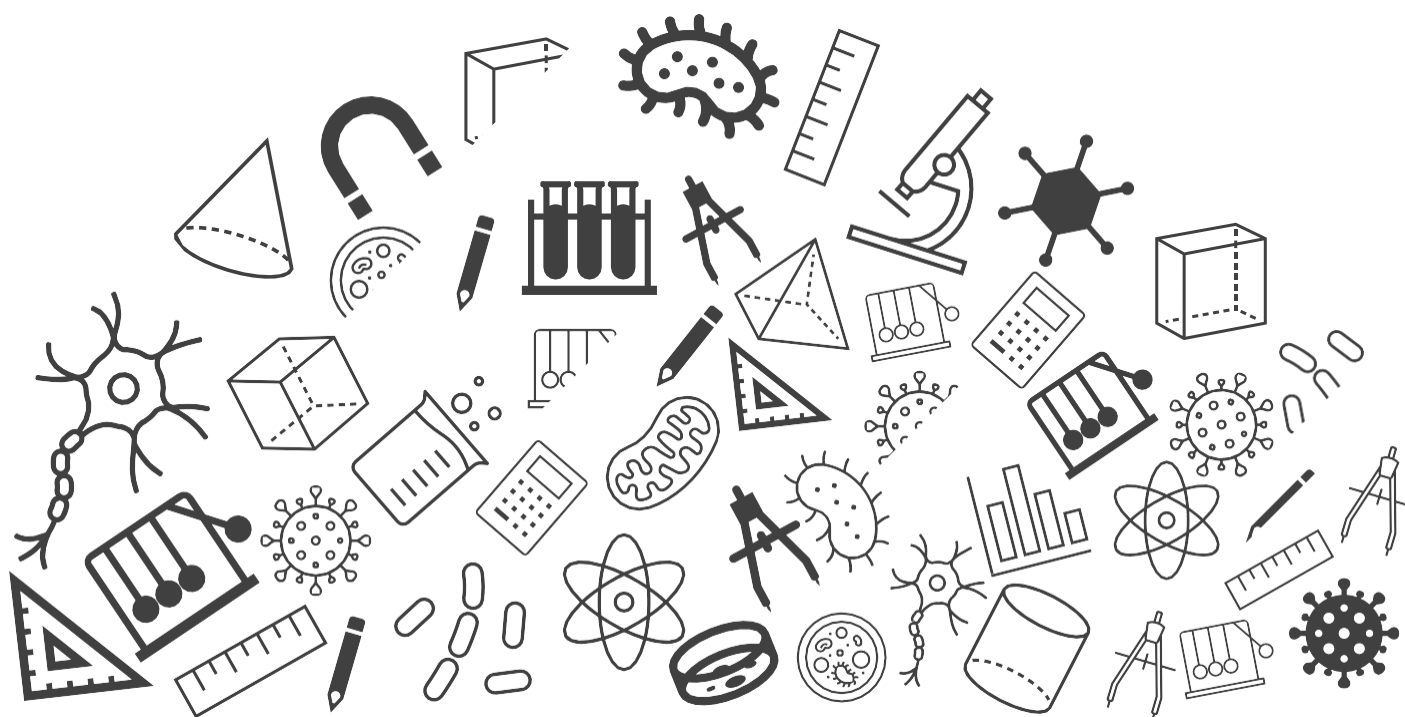




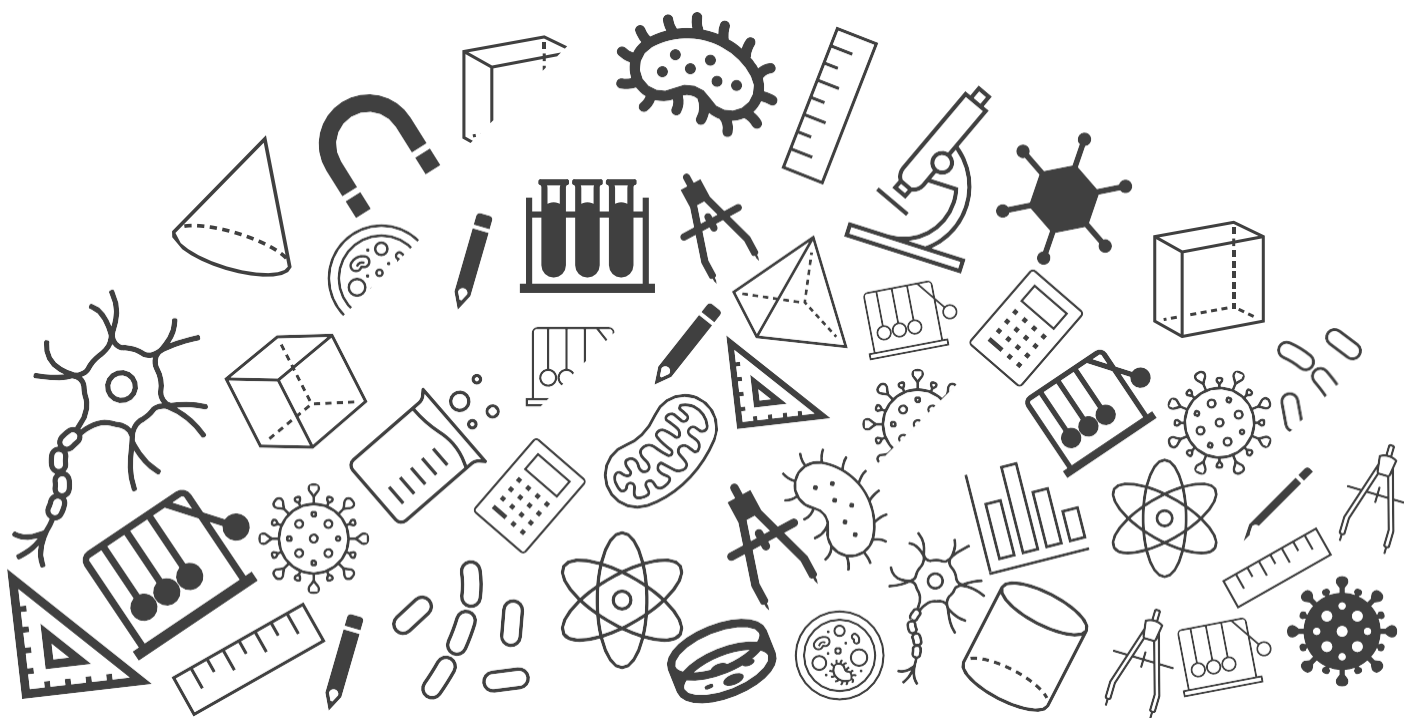
Grade 06: Maths

Exam Important Questions





Decimals



Decimals

1. Convert the following fractions as decimals:

(i) $\frac{4375}{1000}$

(ii) $\frac{111}{250}$

(iii) $25\frac{1}{8}$

[4 marks]

(i) $\frac{4375}{1000} = 4.375$

[1 mark]

(ii) $\frac{111}{250} = \frac{111 \times 4}{250 \times 4} = \frac{444}{1000} = 0.444$

[1 mark]

(iii) $25\frac{1}{8} = 25 + \frac{1}{8} = 25 + \frac{1 \times 125}{8 \times 125} = 25 + \frac{125}{1000} = 25 + 0.125 = 25.125$

[2 marks]

Decimals

2. In a family there are 3 members. The height of the father is 1.65 m. The mother's height is 154 cm and the height of the son is 1.6 m. Who is the tallest in the family?
[3 marks]

$$1 \text{ m} = 100 \text{ cm}$$

$$\text{Hence, } 1 \text{ cm} = \frac{1}{100} \text{ m} = 0.01 \text{ m}$$

[0.5 mark]

$$\text{Height of the father} = 1.65 \text{ m}$$

$$\text{Height of the mother} = 154 \text{ cm} = 154 \times 0.01 = 1.54 \text{ m}$$

$$\text{Height of the son} = 1.6 \text{ m}$$

[0.5 mark]

$$\text{Height of the father} = 1.65 \text{ m}$$

$$\text{Height of the mother} = 154 \text{ cm} = 154 \times 0.01 = 1.54 \text{ m}$$

$$\text{Height of the son} = 1.6 \text{ m}$$

Now the digit in the whole number part of the height of different family members is the same, i.e., 1.

Now comparing the digit in the tenths place $5 < 6$.

Hence, the mother's height is the shortest.

Now comparing the digit in the hundredths place in the height of the father and son:

$$5 > 0$$

Hence, 1.65 is the greatest amongst the decimals.

So, the father is the tallest in the family.

[2 marks]

Decimals

3. The distance between Richa's house and her school hostel is 61 km. For reaching her house from the hostel, she covers 54 km 860 m by taxi, 5 km 65 m by tonga and the rest of the distance by rikshaw. How much distance did Richa cover by rikshaw?
[3 marks]

Distance covered by taxi = 54.860 km
Distance covered by tonga = 5.065 km
Total distance covered by taxi and tonga

$$\begin{array}{r} 54.860 \text{ km} \\ + 5.065 \text{ km} \\ \hline 59.925 \text{ km} \end{array}$$

[1 mark]

Total distance to be covered by Richa = 61 km
Distance covered by taxi and tonga = 59.925 km
Distance covered by rikshaw

$$\begin{array}{r} 61.000 \text{ km} \\ - 59.925 \text{ km} \\ \hline 1.075 \text{ km} \end{array}$$

[1 mark]

Distance covered by rikshaw = 1.075 km = 1 km 75 m

[1 mark]

4. Write 0.066 as a fraction in the lowest term.

[2 marks]

Solution:

Fraction: Representing a number in the form $\frac{a}{b}$, where a and b are whole numbers and b is not equal to zero.

so, $0.066 = \frac{66}{1000}$ [1 mark]

Lowest Form: A fraction is said to be in the simplest (or lowest) form if its numerator and denominator have no common factor except 1.

0.066

$$= \frac{66}{1000} \text{ (dividing numerator and denominator by 2)}$$

$$= \frac{33}{500} \text{ [1 mark]}$$

Decimals

5. Write the following decimal in the place value table:

148.32 [2 marks]

	Number	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
		100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
	148.32	1	4	8	3	2	0

[2 marks]

Refer the image below for better understanding:

1 1 0. 5 6
 ↓ ↓ ↓ ↓ ↓
 Hundreds Tens Ones Tenths Hundredths

6. Express the following as cm using decimals:

83 mm [2 marks]

We know that $10 \text{ mm} = 1 \text{ cm}$

$$\therefore 1 \text{ mm} = \frac{1}{10} \text{ cm}$$

(0.5 mark)

$$\therefore 83 \text{ mm}$$

$$= 1 \text{ mm} \times 83$$

$$= \frac{1}{10} \text{ cm} \times 83$$

$$= 8.3 \text{ cm}$$

(1.5 mark)

Decimals

7. Express the following as rupees using decimals:

5 paise

We know that 100 paise = Rs 1

(0.5 mark)

$$\therefore 1 \text{ paise} = \text{Rs } \frac{1}{100}$$

$$5 \text{ paise} = 1 \text{ paise} \times 5$$

$$= \text{Rs } \frac{1}{100} \times 5$$

$$= \text{Rs } 0.05$$

(1.5 marks)

8. Rani had ₹18.50. She bought one ice-cream for ₹11.75. How much money does she have now?

[3 marks]

Total money = ₹18.50

Cost of Ice-cream = ₹11.75

Amount left = ₹18.50 – ₹11.75

[0.5 mark]

Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths
0	1	8	.	5	0	0
0	1	1	.	7	5	0
—						
0	0	6	.	7	5	0
						= 6.75

[2 marks]

So, Rani has ₹6.75 now.

[0.5 marks]

Decimals

9. What should be added to 25.5 to get 50?

[2 marks]

To get the required result, we have to subtract 25.5 from 50.

$$\begin{array}{r} 50.0 \\ -25.5 \\ \hline 24.5 \end{array}$$

[1.5 marks]

So, 24.5 should be added to 25.5 to get 50.

[0.5 mark]

10. Find the sum in each of the following:

(a) $0.75 + 10.425 + 2$

(b) $280.69 + 25.2 + 38$

[4 marks]

(a) $0.75 + 10.425 + 2$

	Tens	Ones	Tenths	Hundredths	Thousandths
		0	.	7	5
	1	0	.	4	2
+		2	.	0	0
	1	3	.	1	7

So, $0.75 + 10.425 + 2 = 13.175$

[2 marks]

(b) $280.69 + 25.2 + 38$

	Hundreds	Tens	Ones	Tenths	Hundredths
	2	8	0	.	6
		2	5	.	2
+		3	8	.	0
	3	4	3	.	8

So, $280.69 + 25.2 + 38 = 343.89$

[2 marks]