CBSE Sample Paper Class 7 Maths Half Yearly Set 3

SUBJECT: MATHEMATICS CLASS : VII **MAX. MARKS : 80**
DURATION : 3 HRS

General Instructions:

(i). **All** questions are compulsory.
(ii). This question paper contains **30** questions divided into four Sections A, B, C and D.
(iii). **Section A** comprises of 6 questions of **1 mark** each. **Section B** comprises of 6 questions of **2 marks** each. **Section C** comprises of 10 questions of **3 marks** each and **Section D** comprises of 8 questions of **4 marks** each.
(iv). Use of Calculators is not permitted

SECTION – A

1. Find the mean of the first five whole numbers.

2. Write equations for the statements: One fourth of *m* is 3 more than 7.

3. Express 4 kg 8 g in kg.

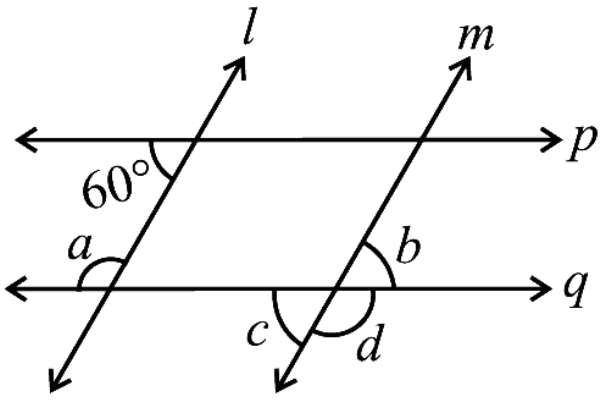
4. Write the Angle opposite to the side LM of ΔLMN.

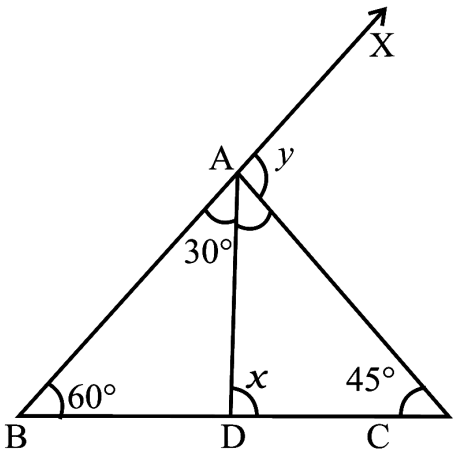
5. The difference in the measures of two complementary angles is 12^0. Find the measures of the angles.

6. Find the ratio of 30 days to 36 hours.

SECTION – B

7. Find the values of the angles *a*, *b*, c and *d* in the given figure lines *l* || *m*, *p* || *q*:





8. In the above right sided figure, find x and y.

9. The population of a city decreased from 25,000 to 24,500. Find the percentage decrease.

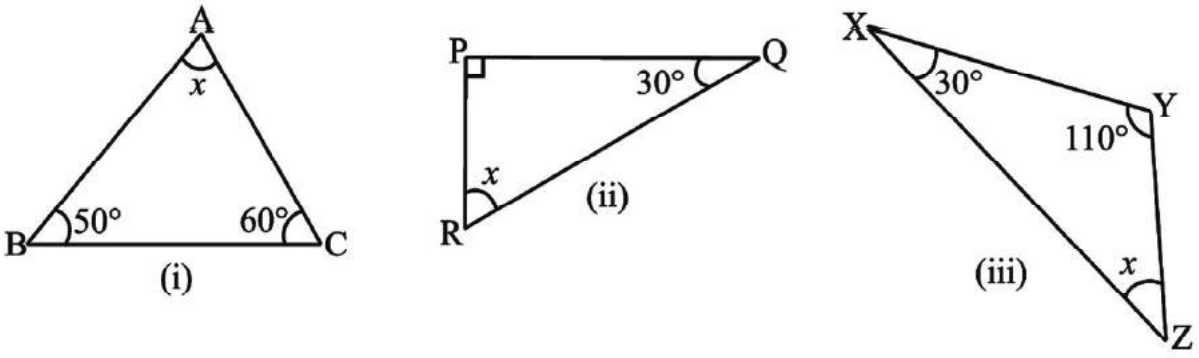
10. Harmeet purchased 3.5kg of potatoes at the rate of Rs.13.75 per kg. How much money should she pay in nearest rupees?

11. If $\Delta ABC \cong \Delta PQR$ under the correspondence ABC $\leftrightarrow$ RQP, write all the corresponding congruent parts of the triangles.

12. Write two integers which are smaller than – 5 but their difference is – 5.

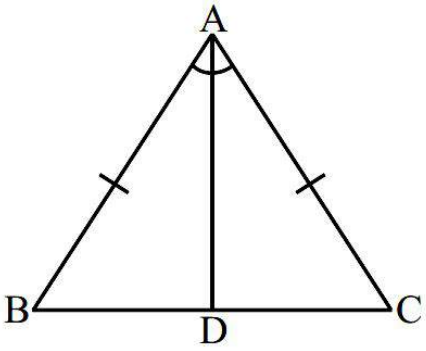
SECTION – C

13. Find the value of x in the following figures:

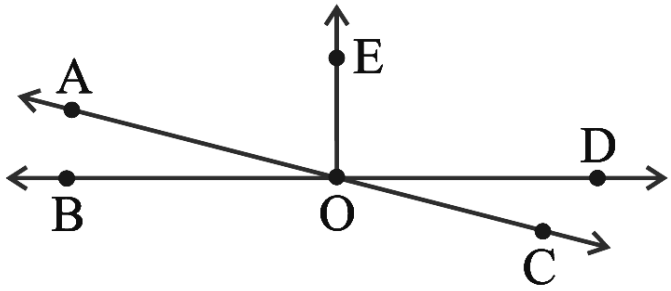


14. The ages in years of 10 teachers of a school are:
32, 41, 28, 54, 35, 26, 23, 33, 38, 40
(i) What is the age of the oldest teacher and that of the youngest teacher?
(ii) What is the range of the ages of the teachers?
(iii) What is the mean age of these teachers?

15. In the below figure, AB = AC and AD is the bisector of $\angle BAC$. Prove that (i) $\Delta ADB \cong \Delta ADC$ (ii) $\angle B = \angle C$



16. In the adjoining figure, name the following pairs of angles.
(i) Obtuse vertically opposite angles
(ii) Adjacent complementary angles
(iii) Adjacent angles that do not form a linear pair

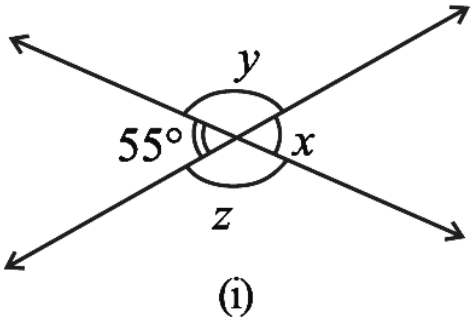


17. Raju's father's age is 5 years more than three times Raju's age. Find Raju's age, if his father is 44 years old.

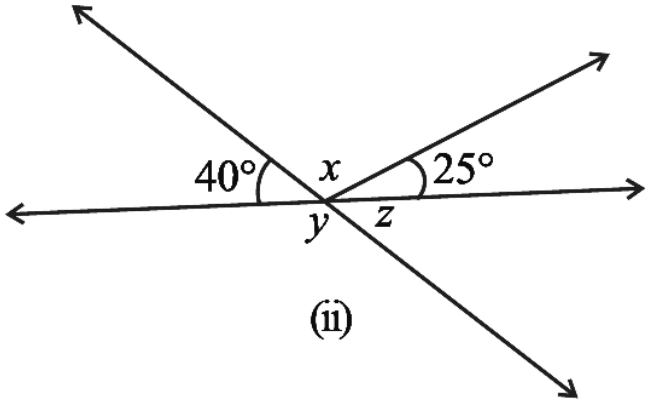
18. Juhi sells a washing machine for Rs 13,500. She loses 20% in the bargain. What was the price at which she bought it?

19. In a family, the consumption of wheat is 4 times that of rice. The total consumption of the two cereals is 80 kg. Find the quantities of rice and wheat consumed in the family.

20. Find the values of the angles *x*, *y*, and *z* in each of the following:



(i)



(ii)

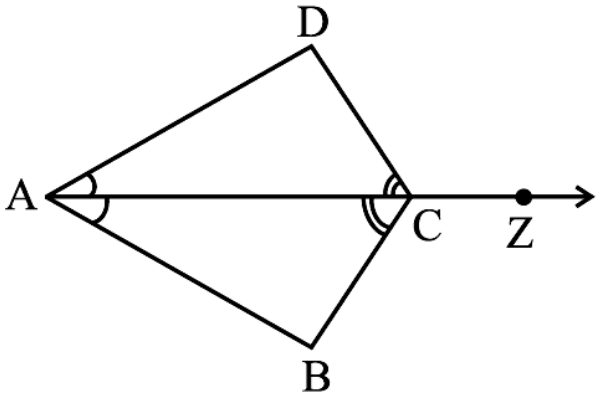
21. An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from 10 m above the ground level, how long will it take to reach – 350 m.

22. Saili plants 4 saplings, in a row, in her garden. The distance between two adjacent saplings is $\frac{3}{4}$ m. Find the distance between the first and the last sapling.

SECTION – D

23. In a class test containing 15 questions, 4 marks are given for every correct answer and (–2) marks are given for every incorrect answer. (i) Gurpreet attempts all questions but only 9 of her answers are correct. What is her total score? (ii) One of her friends gets only 5 answers correct. What will be her score? (iii) What you will do to get good marks?

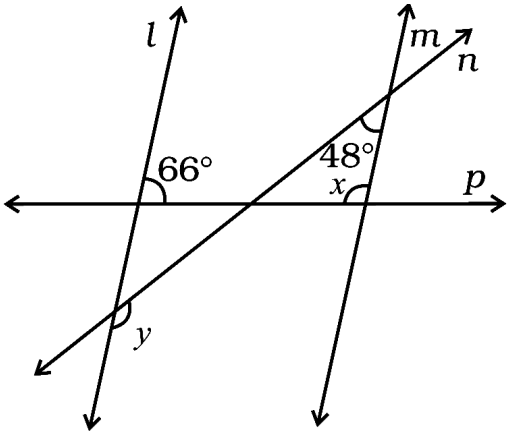
24. In the below figure, ray AZ bisects $\angle$DAB as well as $\angle$DCB.
(i) State the three pairs of equal parts in triangles BAC and DAC.
(ii) Is $\Delta BAC \cong \Delta DAC$? Give reasons.
(iii) Is AB = AD? Justify your answer.
(iv) Is CD = CB? Give reasons.



25. A girl is 28 years younger than her father. The sum of their ages is 50 years. Find the ages of the girl and her father.

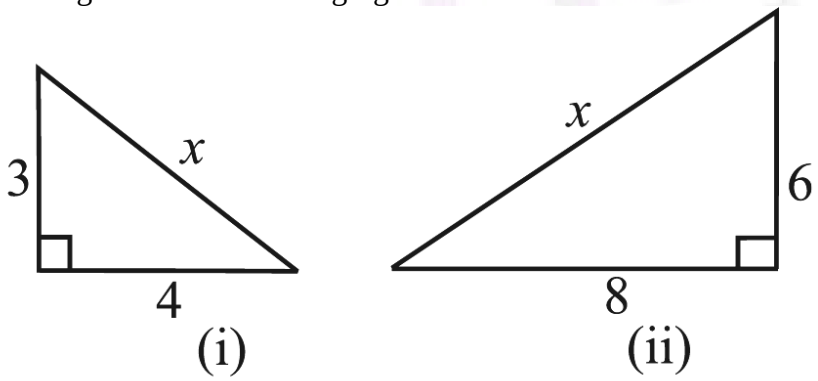
26. Anil deposited Rs. 20,000 for saving as a fixed deposit in a bank at the rate of 10% per annum. Find the amount he will get after 5 years. What are the benefits of savings?

27. In the below figure, two parallel lines l and m are cut by two transversals n and p. Find the values of x and y.



28. In the morning, a milkman filled $5\frac{1}{2}$ L of milk in his can. He sold to Renu, Kamla and Renuka $\frac{3}{4}$ L each; to Shadma he sold $\frac{7}{8}$ L; and to Jassi he gave $1\frac{1}{2}$ L. How much milk is left in the can?

29. Find the unknown length *x* in the following figures



30. A mathematics teacher wants to see, whether the new technique of teaching she applied after quarterly test was effective or not. She takes the scores of the 5 weakest children in the quarterly test (out of 25) and in the half yearly test (out of 25):

Students	Ashish	Arun	Kavish	Maya	Rita
Quarterly	10	15	12	20	9
Half Yearly	15	18	16	21	15