

HALF YEARLY EXAM (2019 – 2020)

Sub: Maths

Class:VII

Marks: 80

Time: $1\frac{1}{2}$ Hrs.

Section A (1×6=6)

Choose the correct answer:

- The sum of -2 and -5 is
a) -7 b)+7 c)-3 d)+3
- The value of $\frac{1}{3} \times \frac{1}{2}$ is
a) $\frac{1}{6}$ b)6 c) $\frac{2}{3}$ d) $\frac{3}{2}$
- Three times x is represented as
a) 3+x b) 3-x c)3x d) $\frac{3}{x}$
- The total measure of the three angles of a triangle is
a) 360° b) 180° c) 90° d) 270°
- If $\triangle DEF \cong \triangle BCA$, the part of $\triangle BCA$ that corresponds to $\angle E$ is
a) $\angle A$ b) CA c) $\angle C$ d)AB
- The measure of the complement of 65° is
a) 40° b) 56° c) 115° d) 25°

Section B(2×6=12)

7. Evaluate

(i) $(-30) \div 10$

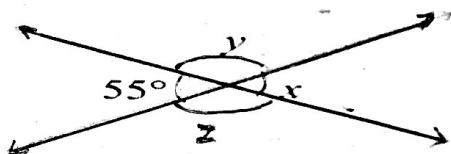
(ii) $9 \times (-3) \times (-2)$

8. Write equations for the following statements.

(i) The sum of numbers x and 4m is 9.

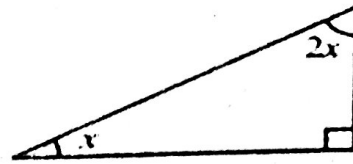
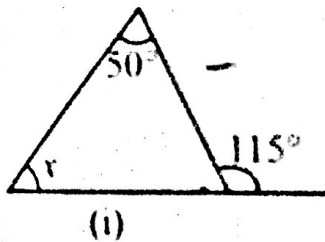
(ii) 2 subtracted from y is 8.

9. Find the values of the angles x and y in the following figure.



aths. (1)

10. Find the value of x in the following triangle:



11. Find the ratio of

(i) Rs. 5 to 50 Paise (ii) 250 : 100

12. (i) Write $\frac{1}{4}$ as percent

(ii) Convert 0.75 as percent.

Section C (3 × 10 = 30)

13. Solve:

i) $12 \div \frac{3}{4}$

ii) $\frac{1}{2}$ of 24

iii) 0.2×6

14. Find the mode and median of the following data:

6, 3, 7, 4, 8, 5, 2, 5, 5

15. Solve the following equation:

$$16 = 4 + 3(t + 2)$$

Or

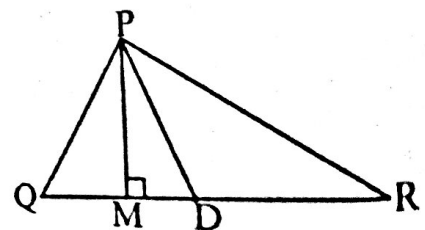
$$7m + \frac{19}{2} = 13$$

16. In $\triangle PQR$, D is the mid-point of QR then

i) PM is _____

ii) PD is _____

iii) Is $QM = MR$?

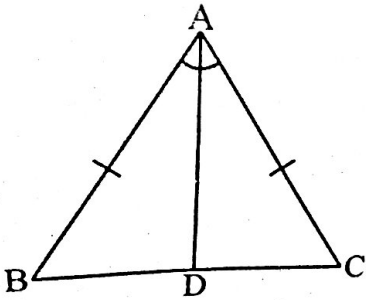


17. Is it possible to have a triangle with the following sides?

6cm, 3cm, 2 cm.

18. PQR is a triangle, right angled at P. If $PQ = 24\text{cm}$, find QR

19. In the given figure $AB = AC$ and AD is the bisector of $\angle BAC$. State three pairs of equal parts in triangle ABC and triangle ADC.



20. (i) Find 5% of 600

(ii) Convert 3 : 1 into percentage.

21. The population of a city decreased from 25000 to 24500. Find the percentage decrease.

22. A local cricket team played 20 matches in one season. It won 25% of them. How many matches did they win?

Section D ($4 \times 8 = 32$)

23. In a class test (+3) marks are given for every correct answer and (-2) marks are given for every incorrect answer and no marks for not attempting any question. Radhika scored 20 marks. If she got 12 correct answers, how many questions has she attempted incorrectly?

Or

Find the product using suitable properties.

$$26 \times (-48) + (-48) \times (-36)$$

24. A vehicle covers a distance of 43.2 Km in 2.4 litres of petrol. How much distance will it cover in one litre of petrol?

25. Some students of 7th class were asked to name their favourite colour so as to decide upon what should be the colour of their School Building. The results are shown in the following table. Represent the given data on a bar graph.

Favourite colour	Red	Green	White	Yellow	Blue
No. of students	10	15	20	50	5

Answer the following questions with the help of the bar graph.

(i) Which is the most preferred colour and which is the least preferred.

(ii) How many colours are there in all?

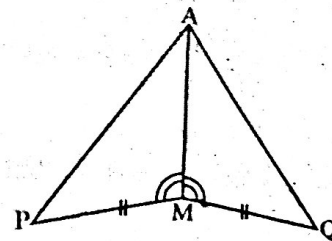
26. Raju's father's age is 5 years more than three times Raju's age. Find Raju's age, if his father's age is 44 years.

27. The lengths of two sides of a triangle are 12 cm and 15 cm. Between what two measures should the length of the third side fall?

28. You have to show that $\Delta AMP \cong \Delta AMQ$. In the following proof supply the missing reason

Reasons

- (i) $PM = QM$ (i) _____
- (ii) $\angle PMA = \angle QMA$ (ii) _____
- (iii) $AM = AM$ (iii) _____
- (iv) $\Delta AMP \cong \Delta AMQ$ (iv) _____



29. Find the amount to be paid at the end of 3 years if Principal is Rs. 1200 at 12% per annum.

30. Juhi sells a washing machine for Rs. 13500. She loses 20% in the bargain. What is the price at which she bought it?

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For each correct answer 1 mark is to be given.

1. -7
2. $\frac{1}{6}$
3. $3X$
4. 180°
5. $\angle C$
6. 25°

Section B ($2 \times 6 = 12$)

7. (i) -3 (ii) 54
8. (i) $x + 4 = 9$ (ii) $y - 2 = 8$
9. $x = 55^\circ$ and $y = 125^\circ$
10. (i) 65° (ii) 30°
11. (i) 10 : 1 (ii) 5 : 2
12. (i) 25% (ii) 75%

Section C ($3 \times 10 = 30$)

13. (i) 16 (ii) 12 (iii) 1.2
14. Arranging the data in descending or ascending order 1m
Mode---5 1m
Median---- 5 1m
15. For correct solving $p = 2$ or $m = \frac{1}{2}$
16. (i) Altitude (ii) Median (iii) No
17. In a triangle the sum of the lengths of any two sides is greater than the length of the third side. 1m
For adding and writing the answer 2m
18. Finding $PR = 7$ cm 3m
19. For writing three pairs of equal parts 3m
20. (i) 30 (ii) 75% 25% 3m
21. 2% 1m for correct solving 2m
22. For solving process and ans 5 Matches 3m

Section D $4 \times 8 = 32$ marks

23. Ans: 8 questions attempted incorrectly for correct solution and ans ----4 m

Or Ans: 480

24. For correct division and statements . ans : 18 Km -----4m

25. Drawing the graph and answering ---4m

26. $3y + 5 = 44$ framing the equation and statements --- 2m ,solving $y = 13$ years -----2m

27. Writing the condition and showing between 3 cm and 27 cm---4m

28. For each correct reason 1m $1 \times 4 = 4m$

29. Ans :Rs.1,632 Formula and calculations -4m

30. Ans : Rs. 16,875 correct calculations ---4m