

CBSE Board
Class VII Mathematics
Term I
Sample Paper 1

Time: 2 ½ hours

Total Marks: 80

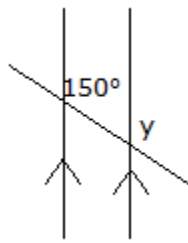
General Instructions:

1. All questions are **compulsory**.
 2. **Section A** comprises of **12** questions carrying 1 mark each.
 3. **Section B** comprises of **12** questions carrying 2 marks each.
 4. **Section C** comprises of **8** questions carrying 3 marks each.
 5. **Section D** comprises of **5** questions carrying 4 marks each.
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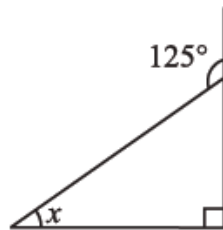
Section A
(Questions 1 to 12 carry 1 mark each)

1. If a, b and c are integers then, according to distributive law
 - A. $a \times (b + c) = a \times b + a \times c$
 - B. $a \times (b + c) = a + b \times a + c$
 - C. $a \times (b + c) = a \times b \times a \times c$
 - D. $a \times (b + c) = a \times c - a \times b$
2. A number is chosen at random from 1 to 5. What is the probability that the number chosen is odd?
 - A. $\frac{2}{5}$
 - B. $\frac{3}{5}$
 - C. $\frac{1}{4}$
 - D. $\frac{1}{6}$
3. The solution of the equation $3x + 4 = 25$ is
 - A. 7
 - B. 8
 - C. 9
 - D. 6

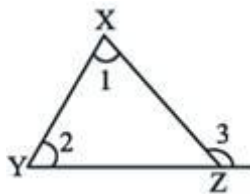
4. In the figure given below, the measure of y is



- A. 30°
B. 120°
C. 130°
D. 150°
5. The measure of angle x , in the given figure is

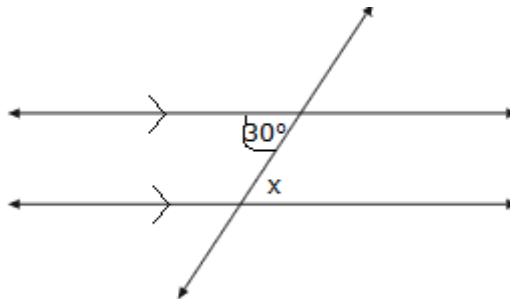


- A. 45°
B. 30°
C. 60°
D. 35°
6. The integer $-2 - (-5)$ can also be written as
- A. $-2 + (-5)$
B. $-2 + 5$
C. $2 - 5$
D. $2 + 5$
7. In the following figure, the relation between the angles 1, 2 and 3 is

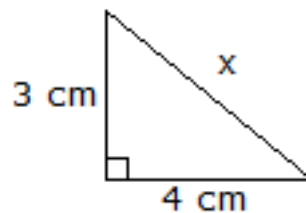


- A. $\angle 3 = \angle 1 - \angle 2$
B. $\angle 3 + \angle 1 = \angle 2$
C. $\angle 3 = \angle 1 + \angle 2$
D. $\angle 3 + \angle 2 = \angle 1$

8. Mean of 11, 10, 12, 12, 9, 10, 14, 12, 9 is ____ .
- A. 20
B. 10
C. 11
D. 14
9. Five added to a one third of a number gives twice the number, then the number is
- A. 3
B. 4
C. 5
D. 6
10. In the following figure, the measure of angle x is

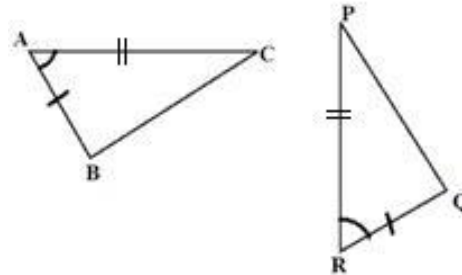


- A. 60°
B. 150°
C. 30°
D. 45°
11. The value of x in the following triangle is



- A. 6 cm
B. 8 cm
C. 5 cm
D. 2 cm

12. Name the pair of congruent triangles in the given figure.



- A. $\triangle ABC \cong \triangle PQR$
- B. $\triangle ABC \cong \triangle RQP$
- C. $\triangle BAC \cong \triangle PQR$
- D. None of these

Section B

(Questions 13 to 24 carry 2 marks each)

13. What is the measure of complement of each of the following angle?

- A. 45°
- B. 54°
- C. 65°

14. Write the following equations in statement form:

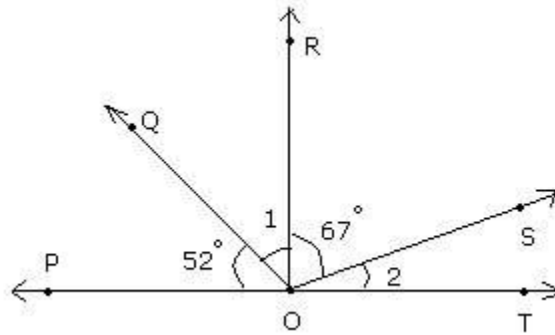
- A. $6n + 4 = 10$
- B. $\frac{y}{7} - 3 = 9$

15. Raju has solved $\frac{2}{4}$ part of an exercise while Sameer solved $\frac{1}{2}$ part of it. Who has solved more?

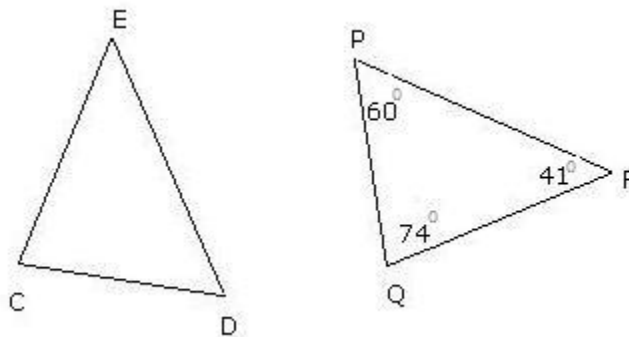
16. How many angles are formed when 2 lines intersect?

17. How many $1\frac{1}{4}$ feet long strips of ribbon can be cut from a ribbon that is $7\frac{1}{2}$ feet long?

18. If RO is perpendicular to PT, find the measure of angles 1 and 2 in the figure below:



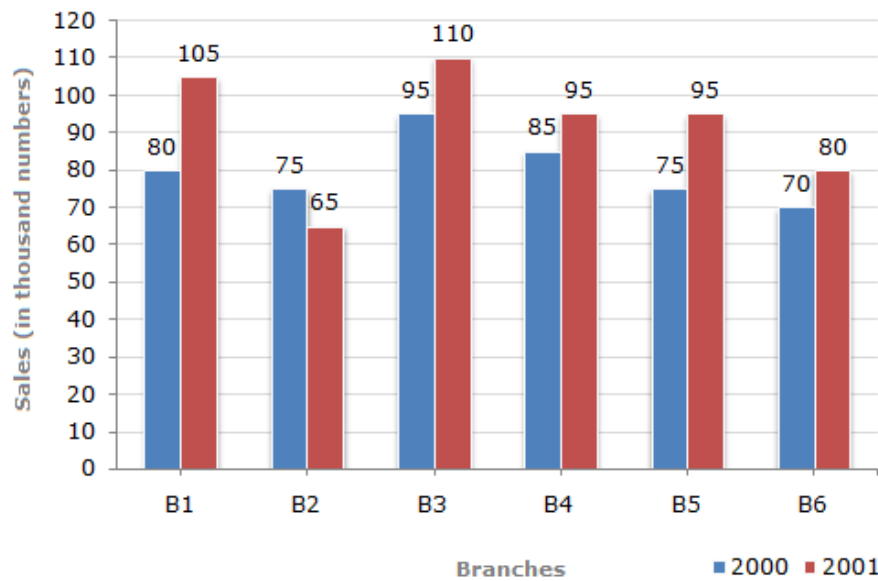
19. If $\frac{2x-1}{3} = \frac{x+2}{2}$, then what is the value of x?
20. A Poultry farm produces 600 eggs every week and delivers them equally to 10 shops. The shopkeepers charge Rs.5 for every good egg but they have to give Rs.2 to the customer if the egg comes out to be rotten. A shopkeeper could only earn Rs.276 despite selling all the eggs. How many eggs were rotten?
21. It takes $\frac{2}{5}$ yards of material to make a shirt. How many yards of material will be required to make 6 shirts?
22. In the figure below, $\triangle CDE \cong \triangle QPR$. What is $m\angle D$?



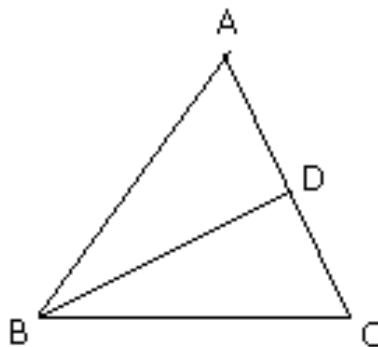
23. In a cricket match, the runs scored by 11 players are as follows
12, 23, 10, 77, 15, 78, 90, 54, 23, 10, 1
Find the average score.
24. Explain ASA congruence condition with the help of a diagram.

Section C
(Questions 25 to 32 carry 3 marks each)

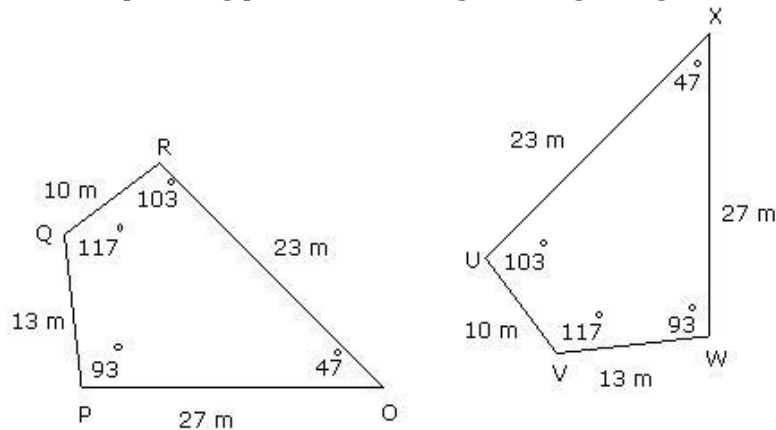
25. The bar graph given below shows the sales of books (in thousands) from six branches of a publishing company during two consecutive years 2000 and 2001.



- (1) What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?
 - (2) What is the average sale of all the branches (in thousand numbers) for the year 2000?
 - (3) Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?
26. Let ABC be an isosceles triangle in which $AB = AC$ and BD is perpendicular to AC. Then, prove that $BD^2 - CD^2 = 2AD \cdot CD$.

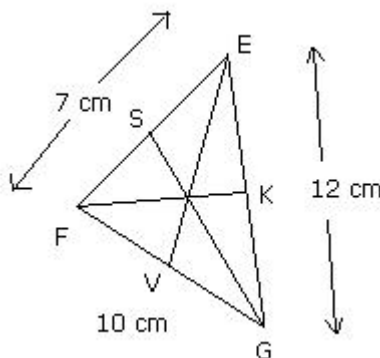


27. Name all the corresponding parts of the congruent figures given below:



28. Sumitra has Rs 34 in denominations of 50 paise and 25 paise coins. If the number of 25 paise coins is twice the number of 50 paise coins, then how many coins of each type does she have in all?

29. In the figure below, EV, FK and GS are the medians of triangle EFG. Find the values of FS, KG and FV.



30. Two equal sides of a triangle are each 5 less than twice the third side. Perimeter of triangle is 55 m. Find the length of its sides.

31. Sam's truck gets him $10\frac{2}{3}$ miles per gallon. Suppose the tank is empty and he puts $5\frac{1}{2}$ gallons of diesel, how far can Sam go with his truck?

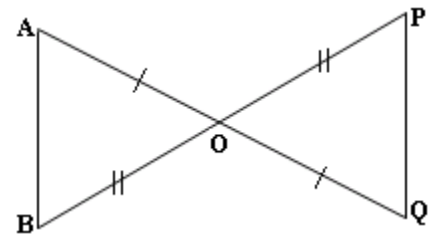
32. The median of the given data is 29 arranged in increasing order of value. What is the value of x?
x, 20, $2x + 6$, $2x + 9$, 40, 45, 52

(Questions 33 to 37 carry 4 marks each)

33. A bag has 12 balls colored yellow, blue, green and red. The number of balls of each colour is the same. A ball is drawn from the bag. Calculate the probability of drawing a yellow ball, a blue ball, a green ball and a red ball at the same time. A ball is drawn from the bag. Calculate the probability of drawing a yellow ball, a blue ball, a green ball and a red ball.

34. A chemist has several beakers full of different liquids that he will use to make a solution. The chemist records the amount of liquid in each beaker: 640.6 milliliters, 908.44 milliliters, 1.5553 liters, and 0.6 liters. How many milliliters of solution will the chemist have after he mixes the liquids in the beakers?

- 35.** In the figure, O is the midpoint of AQ and BP.
- i) Is $\triangle OAB \cong \triangle OPQ$?
 - ii) Which pairs of matching parts have you used to answer
 - iii) Is $AB = PQ$?
 - iv) Is $\triangle OAB \cong \triangle OPQ$?



36. Given data shows performance of two unit tests.

	English	Hindi	Maths	Science	S. Science
Term I	70	60	87	60	60
Term II	78	77	60	70	60

Show the data in a double bar graph.

37. In the figure below, AP is parallel to CD. Angle PAB (w) is equal to 135° and angle DCB (z) is equal to 147° . Find angle ABC.

