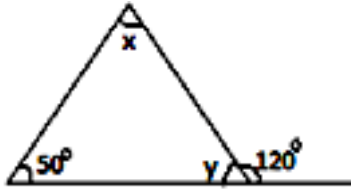


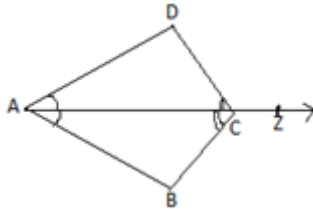
9. Find the values of unknown x and y .



10. If $\triangle ABC \cong \triangle FED$ under the correspondence $ABC \leftrightarrow FED$, write all corresponding congruent parts of the triangles.
11. Find area of the circle whose circumference is 88 cm.
12. If the angles of triangle are in the ratio $2 : 3 : 4$, find the value of each angle.

SECTION - C

13. Verify the following.
- a) $18 \times (7 + -3) = (18 \times 7) + (18 \times -3)$
- b) $(-21) \times (-4 + -6) = (-21 \times -4) + (-21 \times -6)$
14. Construct 3 equations starting with $x = 2$.
15. Ray AZ bisects $\angle DAB$ as well as $\angle DCB$.
- a) State three pairs of equal parts in $\triangle BAC$ and $\triangle DAC$.
- b) Is $\triangle BAC \cong \triangle DAC$? Give reason.
- c) Is $AB = AD$? Justify your answer.



16. A tree is broken at height of 5 m from the ground and its top touches the ground at a distance of 12 m from the base of the tree. Find the original height of the tree.
17. At 5.30 pm the temperature of an iron rod is 224°C . Every minute its temperature decreases by 7°C . Find the temperature

of the rod at 5.50 pm.

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

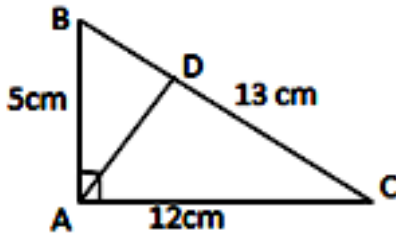
19. Find.

a) $\frac{-3}{7} + \frac{2}{3}$

b) $\frac{-5}{6} - \frac{-3}{11}$

20. Draw a line PQ. Draw another line parallel to PQ at a distance 3 cm from it. (using ruler and compasses)

21. $\triangle ABC$ is right angled at A. AD perpendicular to BC. If AB = 5 cm, BC = 13 cm and AC = 12 cm. Find the area of the $\triangle ABC$ also find the height of AD.



22. Subtract $24ab - 10b - 8a$ from $30ab + 12b + 14a$.

SECTION - D

23. Solve.

a) $3n + 7 = 25$

b) $4 + 5(p - 1) = 34$

c) $a/5 + 3 = 5$

d) $5x/2 = 20$

24. ABC is an isosceles triangle with $AB = AC$ with AD one of its altitudes.

a) State 3 pairs of equal parts $\triangle ADB$ and $\triangle ADC$.

b) Is $\triangle ADB \cong \triangle ADC$? Why or why not?

c) Is $\angle B = \angle C$? Why or why not?

d) Is $BD = CD$? Why or why not?

