## DR. VIRENDRA SWARUP PUBLIC SCHOOL, KALYANPUR <br> Revision Worksheet

Class IX Session: 2021-2022
Chapter: Constructions

1. Construct the following angles with the help of ruler and compass, if possible$35^{0}, 40^{0}, 57^{0}, 75^{0}, 15^{0}, 135^{0}$.
2. Draw a $\triangle \mathrm{ABC}$, in which $\mathrm{AB}=4 \mathrm{~cm}, \angle \mathrm{~A}=60^{\circ}$ and $\mathrm{BC}-\mathrm{AC}=115 \mathrm{~cm}$.
3. Draw a $\triangle \mathrm{ABC}$, in which $\mathrm{BC}=5 \mathrm{~cm}, \angle \mathrm{~B}=60^{\circ}$ and $\mathrm{AC}+\mathrm{AB}=7.5 \mathrm{~cm}$.
4. Draw a equilateral triangle whose altitude is 6 cm .
5. Draw a triangle ABC whose perimeter is 10.4 cm and the base angle are $45^{\circ}$ and $60^{\circ}$.
6. Construct a triangle ABC , in which $\angle \mathrm{B}=60^{\circ}, \angle \mathrm{C}=45^{\circ}$ and $\mathrm{AB}+\mathrm{BC}+\mathrm{CA}=11 \mathrm{~cm}$.
7. Construct a triangle ABC in which $\mathrm{BC}=7 \mathrm{~cm}, \angle \mathrm{~B}=75^{\circ}$ and $\mathrm{AB}+\mathrm{AC}=13 \mathrm{~cm}$.
8. Construct a triangle ABC in which $\mathrm{BC}=8 \mathrm{~cm}, \angle \mathrm{~B}=45^{\circ}$ and $\mathrm{AB}-\mathrm{AC}=3.5 \mathrm{~cm}$.
9. Construct a triangle PQR in which $\mathrm{QR}=6 \mathrm{~cm}, \angle \mathrm{Q}=60^{\circ}$ and $\mathrm{PR}-\mathrm{PQ}=2 \mathrm{~cm}$.
10. Construct a triangle XYZ in which $\angle \mathrm{Y}=30^{\circ}, \angle \mathrm{Z}=90^{\circ}$ and $\mathrm{XY}+\mathrm{YZ}+\mathrm{ZX}=11 \mathrm{~cm}$.
11. Construct a right triangle whose base is 12 cm and sum of its hypotenuse and other side is 18 cm .
12. Construct a triangle ABC in which $\mathrm{BC}=3 \mathrm{~cm}, \angle \mathrm{~B}=30^{\circ}$ and $\mathrm{AB}+\mathrm{AC}=5.2 \mathrm{~cm}$.
13. Construct a triangle ABC in which $\mathrm{BC}=6 \mathrm{~cm}, \angle \mathrm{~B}=60^{\circ}$ and the sum of other two sides is 9 cm .
14. Construct a triangle ABC in which $\mathrm{BC}=5.6 \mathrm{~cm}, \angle \mathrm{~B}=30^{\circ}$ and the difference between the other two sides is 3 cm .
15. Construct a triangle $A B C$ whose perimeter is 14 cm and the sides are in ratio $2: 3: 4$.
16. Construct a triangle ABC in which $\mathrm{BC}=7.5 \mathrm{~cm}, \angle \mathrm{~B}=45^{\circ}$ and $\mathrm{AB}-\mathrm{AC}=4 \mathrm{~cm}$.
17. Construct a square of side 3 cm .
18. Construct a rectangle whose adjacent sides are of lengths 5 cm and 3.5 cm .
19. Construct a rhombus whose side is of length 3.4 cm and one of its angles is $45^{\circ}$.
20. Construct a triangle if its perimeter is 10.4 cm and two angles are $45^{\circ}$ and $120^{\circ}$.
21. Construct a triangle PQR given that $\mathrm{QR}=3 \mathrm{~cm}, \angle \mathrm{PQR}=45^{\circ}$ and $\mathrm{QP}-\mathrm{PR}=2 \mathrm{~cm}$.
22. Construct a right triangle when one side is 3.5 cm and sum of other sides and the hypotenuse is 5.5 cm .
23. Construct an equilateral triangle if its altitude is 3.2 cm .
24. Construct a rhombus whose diagonals are 4 cm and 6 cm in lengths.
