# SUBJECT: MATHEMATICS STD-VI <br> TOPIC- TRIANGLES <br> ASSIGNMENT (ADVANCE) 

## Mark the correct alternative in each of the following questions

1. Each angle of an equilateral triangle is $\qquad$
(i) $45^{\circ}$
(ii) $60^{\circ}$
(iii) $90^{\circ}$
(iv) $30^{\circ}$
2. If we will produce each side of a triangle, then the number of exterior angles produced is $\qquad$
(i) 9
(ii) 2
(iii) 3
(iv) 6

Answer the following questions.
3. Calculate the number of triangles in this figure.

4. Classify the triangle into acute triangle, obtuse triangle and right triangle with the following angles:
(i) $60^{\circ}, 75^{\circ}$
(ii) $20^{\circ}, 30^{\circ}$
5. Classify the triangle according to sides/ angles, that is, equilateral, isosceles and right-angled triangles:
(i) $10 \mathrm{~cm}, 8 \mathrm{~cm}, 6 \mathrm{~cm}$.
(ii) $7 \mathrm{~cm}, 24 \mathrm{~cm}, 25 \mathrm{~cm}$
6. Is it possible to draw a triangle by taking the measurements $13 \mathrm{~cm}, 10 \mathrm{~cm}$,

23 cm assides? Justify your answer.
7. Find the sum of $\angle A, \angle B, \angle C, \angle D, \angle E$ and $\angle F$ in he given figure

8. The angles of a triangle are in the ratio of 2:3:4. Find the measure of each angles of the triangle.
9. In this figure find $\angle E$

10. If $10^{\circ}$ is subtracted from each angle of a triangle then the remaining angles are in the ratio $3: 4: 5$. Calculate the angles of the triangle.

