INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS

Subject : Mathematics	Topic : Lines And Angles	Date of Worksheet : 22 - 8 - 2019
Worksheet No: 6		
Resource Person: Sunitha Rajeev		Date : _____
Name of the Student :_____	Class &Division : IX	Roll Number : __

Section A (Basic Skill)   **Marks**
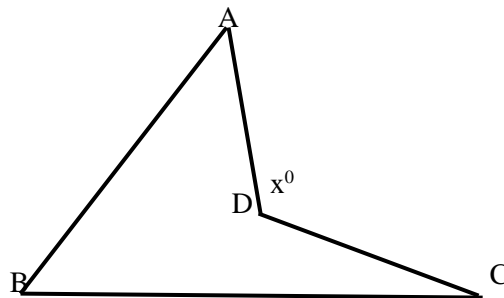
Evaluate

1. $\frac{8}{25} \times \frac{5}{16}$

2. $\frac{8}{9} \times \frac{3}{64}$

3. $2\frac{4}{7} \div \frac{45}{14}$

4. $7\frac{5}{6} + 4\frac{2}{5} - 6\frac{2}{15}$

5.   What should be added to $\left[\frac{5}{6} - \frac{7}{8}\right]$ to get $\frac{1}{2}$?

Section B

1.   In Δ ABC, if $\angle A = (2x - 5^0)$, $\angle B = (5x + 5^0)$, $\angle C = (3x + 50^0)$, then find the value   2
     of x, $\angle A$, $\angle B$ and $\angle C$.

2.   Prove that if one angle of a triangle is equal to the sum of the other two angles, then   2
     the triangle is right angled triangle.

3.   In the given figure, find the value of x^0 , if $\angle A = 23°$, $\angle B = 40°$ $\angle C = 35°$ 3

4.   In the figure, if AB// CF and CD//FE, then find the value of x.   3
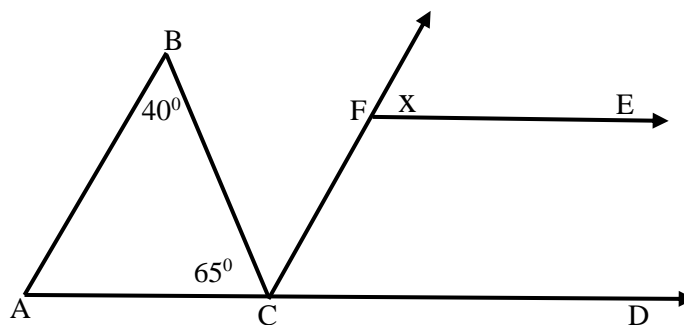
5.   In a ΔABC , $\angle A + \angle B = 116^0$ and $\angle B + \angle C = 126^0$. Find the measure of each   3
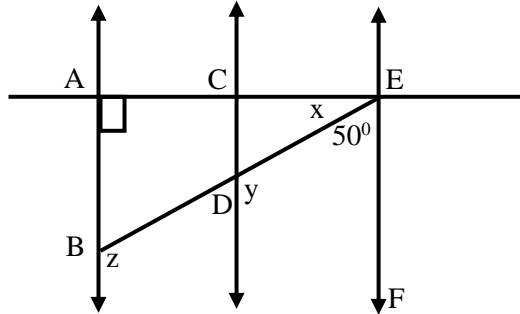
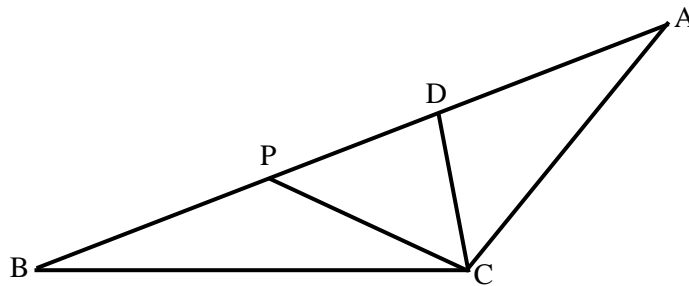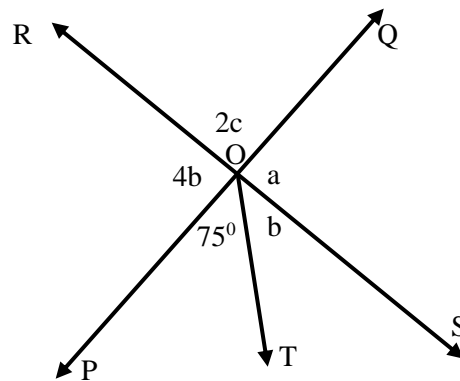angle of the triangle.

6. In the given figure AB // CD//EF. EA is perpendicular to AB, $\angle BEF = 50^0$. Find the values of x, y and z.   3
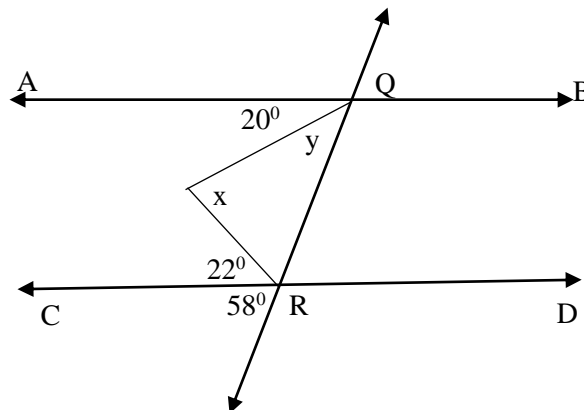
7. In the given figure, $\angle ACD = \angle ABC$ and CP bisects $\angle BCD$. Prove that $\angle APC = \angle ACP$.   4

8. In the given figure, two straight lines PQ and RS intersect each other at O. If $\angle POT = 75^0$, find the values a, b, c.   4

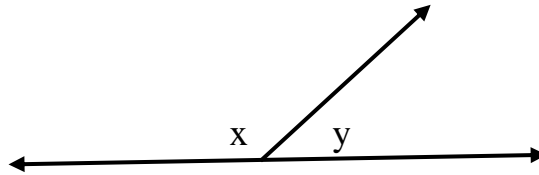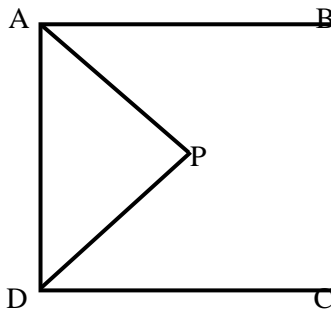9. In the given figure , find the value of x and y if AB // CD.   4

10. Prove that the sum of three angles of a triangle is 180^0. Also find the angles of a triangle if they are in the ratio 5 : 6 : 7.   4
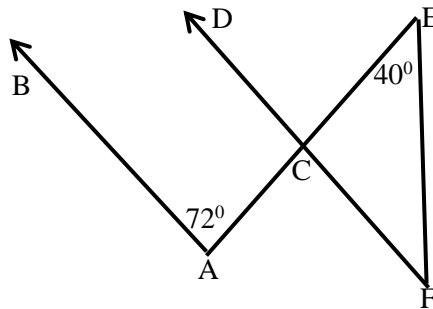
Section C

1. In the given figure, x is greater than y by $\frac{1}{6}$ of a straight angle. Find the value of x and y.   3

2. In the given figure , AP and DP are bisectors of $\angle A$ and $\angle D$. Prove that $2\angle APD = \angle B + \angle C$.   4

4. In the given figure, AB // CD, $\angle BAC = 72^0$ and $\angle CEF = 40^0$. Find $\angle CFE$.   4

5. In the given figure, AB // CD, $\angle ECD = 24^0$, $\angle EDC = 42^0$ and AC = CE. Find x and y.   4