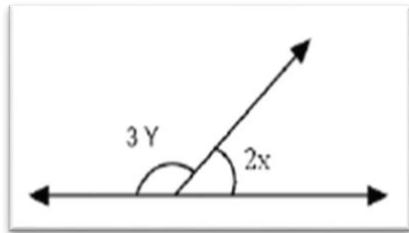
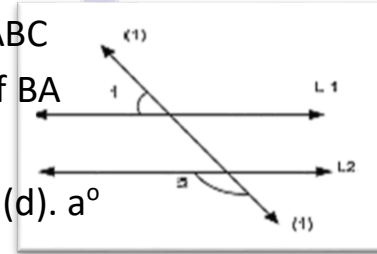
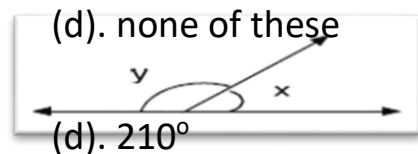


Name:

Date:

- 01.** Measurement of reflex angle is
 (a). 90° (b). b/w 0° and 90° (c). b/w 90° and 180° (d). b/w 180° and 360°
- 02.** The sum of angle of a triangle is
 (a). 0° (b). 90° (c). 180° (d). none of these
- 03.** In fig if $x=30^\circ$ then $y=$
 (a). 90° (b). 180° (c). 150° (d). 210°
- 04.** It two lines intersect each other then
 (a). Vertically opposite are equal (b). corresponding angle are equal
 (c). Alternate interior angle are equal (d). none of these
- 05.** The measure of Complementary angle of 63° is
 (a). 30° (b). 36° (c). 27° (d). none of there
- 06.** If two angles of a triangle is 30° and 45° what is measure of third angle
 (a). 95° (b). 90° (c). 60° (d). 105°
- 07.** The measurement of Complete angle is
 (a). 0° (b). 90° (c). 180° (d). 360°
- 08.** The measurement of sum of linear pair is
 (a). 180° (b). 90° (c). 270° (d). 360°
- 09.** The difference of two complementary angles is 400. The angles are
 (a). $65^\circ, 35^\circ$ (b). $70^\circ, 30^\circ$ (c). $25^\circ, 65^\circ$ (d). $75^\circ, 110^\circ$
- 10.** Given two distinct point P and Q in the interior of ΔABC , then AB will be
 (a). in the interior of ΔABC (b). in the interior of ΔABC
 (c). on the ΔABC (d). on the both sides of BA
- 11.** The complement of $(90 - a)^\circ$ is
 (a). $-a^\circ$ (b). $(90 + 2a)^\circ$ (c). $(90 - a)^\circ$ (d). a°
- 12.** The number of angles formed by a transversal with a pair of lines is
 (a). 6 (b). 3 (c). 8 (d). 4
- 13.** In fig $L_1 \parallel L_2$ And $\angle 1 = 52^\circ$ the measure of $\angle 2$ is.
 (a). 38° (b). 128° (c). 52° (d). 48°
- 14.** In fig $x= 30^\circ$ the value of Y is
 (a). 10° (b). 40° (c). 36° (d). 45°



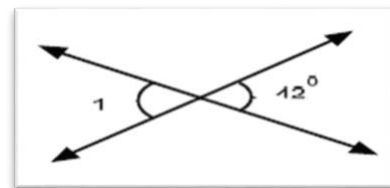
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15. Which of the following pairs of angles are complementary angle?

- (a). $25^\circ, 65^\circ$ (b). $70^\circ, 110^\circ$ (c). $30^\circ, 70^\circ$ (d). $32.1^\circ, 47.9^\circ$

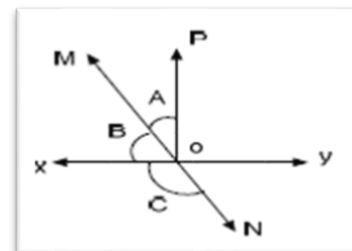
16. In fig the measure of $\angle 1$ is.

- (a). 158° (b). 138° (c). 42° (d). 48°



17. In figure the measure of $\angle a$ is

- (a). 30° (b). 150° (c). 15°
(d). 50°

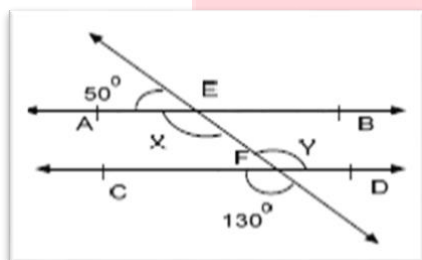


18. The correct statement is-

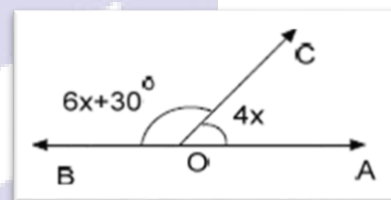
- (a). A line segment has one end point only.
(b). The ray AB is the same as the ray BA.
(c). Three points are collinear if all of them lie on a line.
(d). Two lines are coincident if they have only one point in common.

19. One angle is five times its supplement. The angles are-

- (a). $15^\circ, 75^\circ$ (b). $30^\circ, 150^\circ$ (c). $36^\circ, 144^\circ$ (d). $160^\circ, 40^\circ$



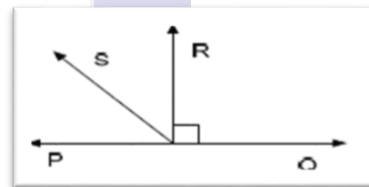
Q01. In fig lines xy and mn intersect at O . If $\angle POY = 90^\circ$ and $a:b = 2:3$ find c .



Q02. In fig find the angles of x and y then Show that $AB \parallel CD$.

Q03. What value of x would make AOB a line if $\angle AOC = 4x$ and $\angle BOC = 6x + 30^\circ$.

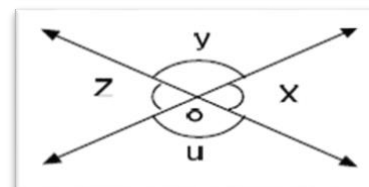
Q04. In fig. POQ is a line. Ray OR is perpendicular to line PQ . OS is another ray lying between rays OP and OR . Prove that $\angle ROS = \frac{1}{2}(\angle QOS - \angle POS)$.



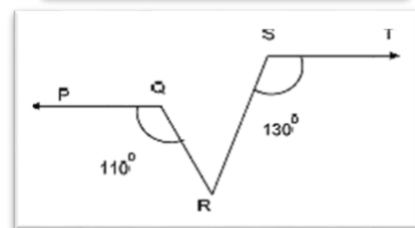
Q05. In fig lines P and R intersected at O , if $x = 45^\circ$ find x , y and u .

Q06.

Q07. It is given that $\angle XYZ = 64^\circ$ and XY is produced to point P . A ray YQ bisects $\angle ZYP$. Draw a figure from the given information. Find $\angle XYQ$ and reflex $\angle QYP$.



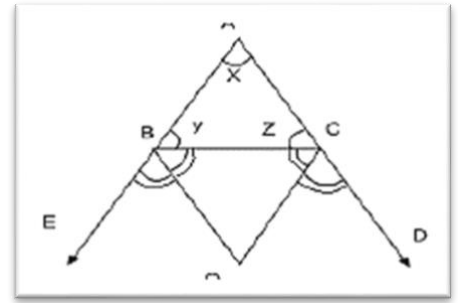
Q08. In fig if $PQ \parallel ST$, $\angle PQR = 110^\circ$ and $\angle RST = 130^\circ$. Find $\angle QRS$.



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Q09. The exterior angle of a triangle is 110° and one of the interior opposite angle is 35° . Find the other two angles of the triangle.

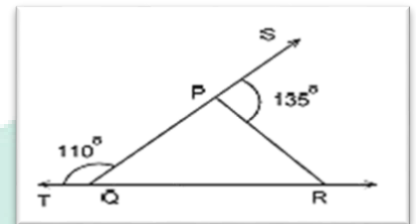
Q10. In fig the side AB and AC of $\triangle ABC$ are produced to point E and D respectively. If bisector BO and CO of $\angle CBE$ and $\angle BCD$ respectively meet at point O, then prove that $\angle BOC = 90^\circ - \angle BAC/2$.



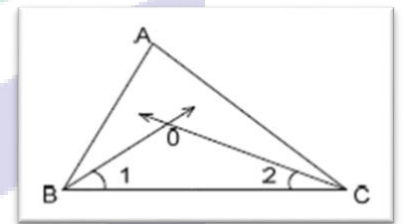
Q11. Of the three angles of a triangle, one is twice the smallest and another is three times the smallest. Find the angles.

Q12. Prove that if one angle of a triangle is equal to the sum of other two angles, the triangle is right angled.

Q13. In fig. sides QP and RQ of $\triangle PQR$ are produced to points S and T respectively. If $\angle SPR = 135^\circ$ and $\angle PQT = 110^\circ$, find $\angle PRQ$.

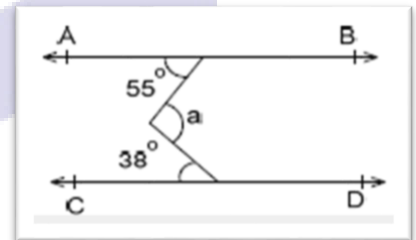


Q14. In fig the bisector of $\angle ABC$ and $\angle BCA$ intersect each other at point O. Prove that $\angle BCO = 90^\circ + \angle A/2$.



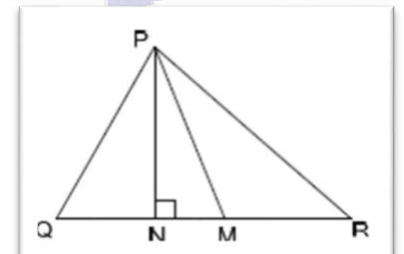
Q15. The side BC of $\triangle ABC$ is produced from ray BD. CE is drawn parallel to AB show that $\angle ACD = \angle A + \angle B$. Also prove that $\angle A + \angle B + \angle C = 180^\circ$.

Q16. Prove that if a transversal intersect two parallel lines, then each pair of alternate interior angles is equal.

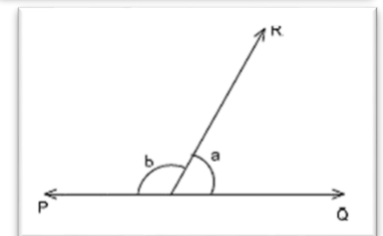


Q17. In given fig. $AB \parallel CD$. Determine $\angle a$.

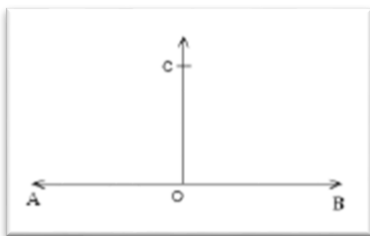
Q18. In fig. $\angle Q > \angle R$ and M is a point on QR such that PM is the bisector of $\angle QPR$ if the \perp from P on QR meets QR at N, then prove that $\angle MPN = (\angle Q - \angle R)/2$.



Q19. In the given figure $\angle POR$ and $\angle QOR$ form a linear pair if $a - b = 80^\circ$. Find the value of 'a' and 'b'.

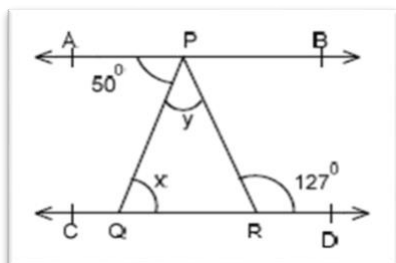
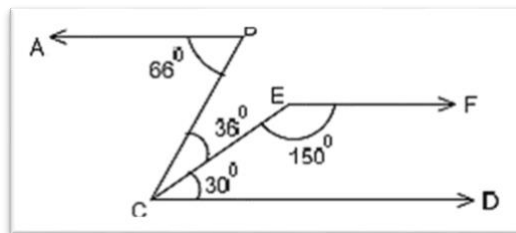


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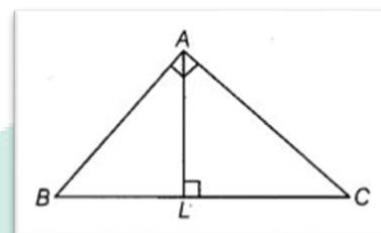
Q20. If ray OC stands on a line AB such that $\angle AOC = \angle BOC$, then stands that $\angle AOC = 90^\circ$.

Q21. In the given figure show that $AB \parallel EF$.



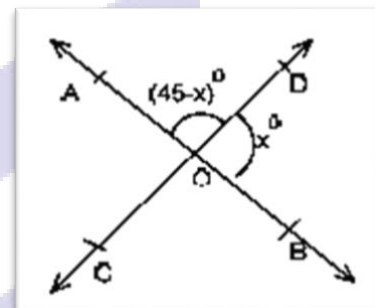
Q22. In figure if $AB \parallel CD$, $\angle APQ = 50^\circ$ and $\angle PRD = 127^\circ$. Find x and y.

Q23. A $\triangle ABC$ a right angled at A. D is a point on BC such that $AD \perp BC$. Prove that $\angle BAD = \angle ACB$.

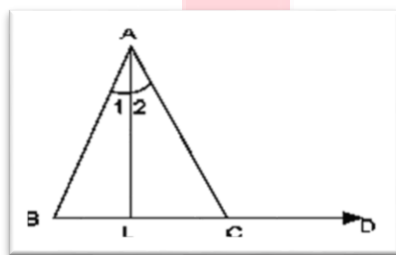


Q24. In $\triangle ABC$ $\angle B = 45^\circ$, $\angle C = 55^\circ$ and bisector $\angle A$ meets BC at a point L. find $\angle ALB$ and $\angle ALC$.

Q25. In figure two straight lines AB and CD intersect at a point O. It $\angle BOD = x^\circ$ and $\angle AOD = (45 - x)^\circ$. Find the value of x hence find

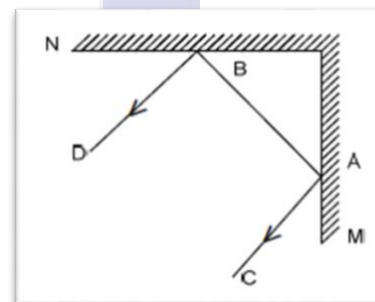


- (a). $\angle BOD$ (b). $\angle AOD$ (c). $\angle AOC$ (d). $\angle BOC$



Q26. The side BC of a $\triangle ABC$ is produced to D. the bisector of $\angle A$ meets BC in L as shown in fig. Prove that $\angle ABC + \angle ACD = 2\angle ALC$.

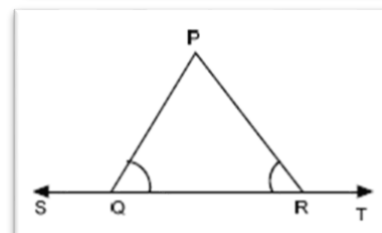
Q27. In fig M and N are two plane mirrors \perp to each other; prove that the incident ray CA is parallel to reflected ray BD.



Q28. Prove that if two lines intersect each other then vertically opposite angles are equal.

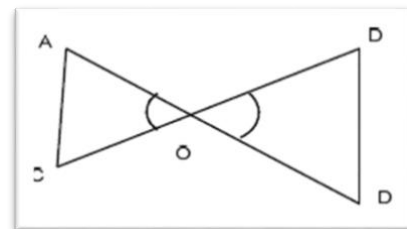
Q29. The measure of an angle is twice the measure of supplementary angle. Find its measure.

Q30. In fig $\angle PQR = \angle PRQ$. Then prove that $\angle PQS = \angle PRT$.

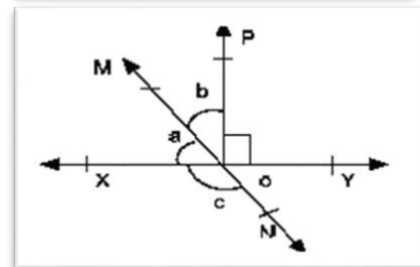


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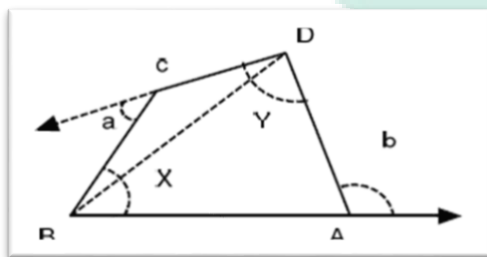
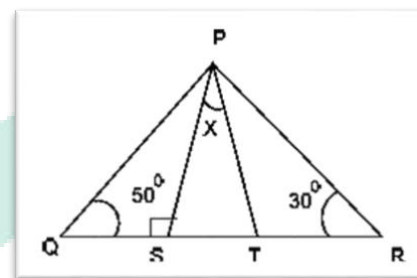
Q31. In the given fig $\angle AOC = \angle ACO$ and $\angle BOD = \angle BDO$ prove that $AC \parallel DB$.



Q32. In fig lines XY and MN intersect at O. If $\angle POY = 90^\circ$ and $a:b=2:3$ find $\angle C$.

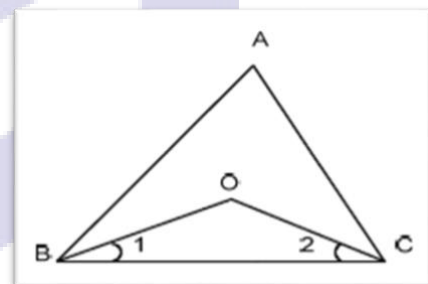


Q33. In fig PT is the bisector of $\angle QPR$ in $\triangle PQR$ and $PS \perp QR$, find the value of x.

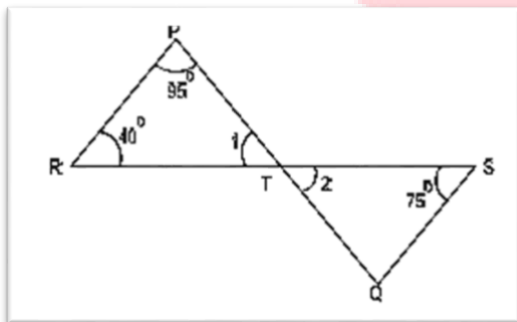
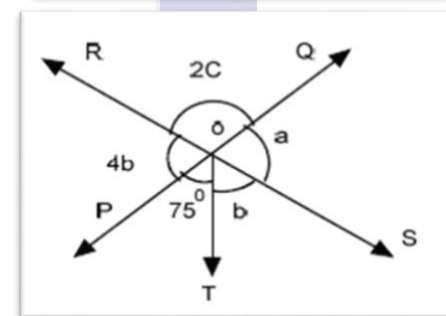


Q34. The sides BA and DC of a quadrilateral ABCD are produced as shown in fig show that $\angle X + \angle Y = \angle a + \angle b$.

Q35. In the BO and CO are Bisectors of $\angle B$ and $\angle C$ of $\triangle ABC$, show that $\angle BOC = 90^\circ + \frac{1}{2}\angle A$.



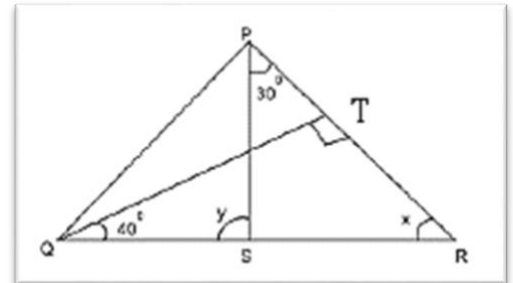
Q36. In fig two straight lines PQ and RS intersect each other at o, if $\angle POT = 75^\circ$. Find the values of a, b and c.



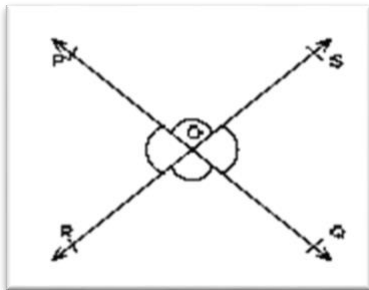
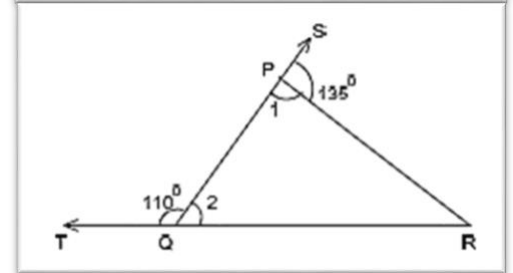
Q37. In figure if lines PQ and RS intersect at point T. Such that $\angle PRT = 40^\circ$, $\angle RPT = 95^\circ$ and $\angle TSQ = 75^\circ$, find $\angle SQT$.

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Q38. In figure, if $QT \perp PR$, $\angle TQR = 40^\circ$ and $\angle SPR = 50^\circ$. Find x and y .

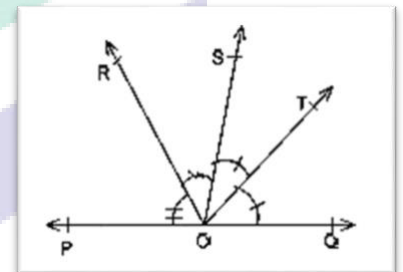


Q39. In figure sides QP and RQ of $\triangle PQR$ are produced to points S and T respectively if $\angle SPR = 135^\circ$ and $\angle PQT = 110^\circ$, find $\angle PRQ$.



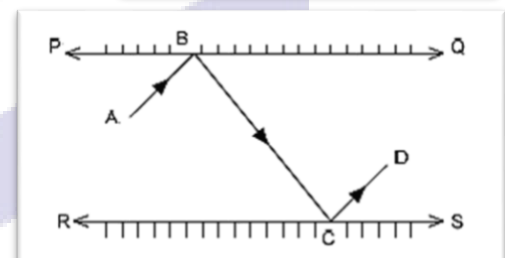
Q40. In figure lines PQ and RS intersect each other at point O. If $\angle POR : \angle ROQ = 5 : 7$. Find all the angles.

Q41. In figure ray OS stands on a line POQ, ray OR and ray OT are angle bisector of $\angle POS$ and $\angle SOQ$ respectively. If $\angle POS = x$, find $\angle ROT$.



Q42. If a transversal intersects two lines such that the bisectors of a pair of corresponding angles are parallel, then prove that the two lines are parallel.

Q43. In figure PQ and RS are two mirrors placed parallel to each other. An incident ray AB strikes the mirror PQ at B, the reflected ray moves along the path BC and strikes the mirror RS at C and again reflects back along CD. Prove that $AB \parallel CD$.



Q44. It is given that $\angle XYZ = 64^\circ$ and XY is produced to point P. Draw a figure from the given information. If ray YQ bisects $\angle ZYP$. Find $\angle XYQ$ and reflex $\angle QYP$.