

CLASS: X. MATH ACTIVITY NO.: 3. TANGENT TO A CIRCLE AT A POINT.

OBJECTIVE: Construction of tangent to a circle at a point on it when the centre of the circle is known (by paper folding).

DESIGN AND OR APPROACH TO THE ACTIVITY: 1) Definition of a tangent to a circle. 2) To draw a line perpendicular to a given line at a point on it (by paper folding method).

PROCEDURE: 1) Draw a circle of given radius with centre O on a plain sheet of paper. 2) Let P be the given point on the circle. Join OP and extend it to Q as shown in fig(i). 3) Fold the paper along OQ and press the two parts to form a crease along the line OQ. Now, fold the paper in such a way that QP falls along OP and it passes through P. Press the two parts to form a crease. Unfold the paper and mark the crease by a line TPT' as shown in fig(ii).

RESULT: The line TPT' is the tangent to the circle at the given point P.



