Geometry Regents at Random Worksheets
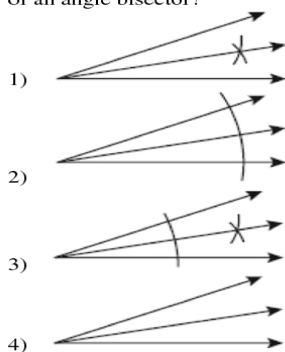
1   The lines $3y + 1 = 6x + 4$ and $2y + 1 = x - 9$ are
1)   parallel
2)   perpendicular
3)   the same line
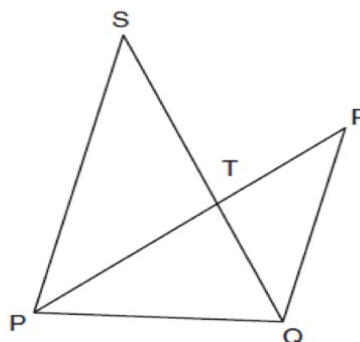4)   neither parallel nor perpendicular

2   Which illustration shows the correct construction of an angle bisector?

3   The endpoints of $\overline{CD}$ are $C(-2,-4)$ and $D(6,2)$. What are the coordinates of the midpoint of $\overline{CD}$?
1) $(2,3)$
2) $(2,-1)$
3) $(4,-2)$
4) $(4,3)$

4   What is the measure of an interior angle of a regular octagon?
1)   45°
2)   60°
3)   120°
4)   135°

5   In the diagram below, $\overline{SQ}$ and $\overline{PR}$ intersect at T, $\overline{PQ}$ is drawn, and $\overline{PS} \parallel \overline{QR}$.

What technique can be used to prove that $\triangle PST \sim \triangle RQT$?
1)   SAS
2)   SSS
3)   ASA
4)   AA

6   The degree measures of the angles of $\triangle ABC$ are represented by x, $3x$, and $5x - 54$. Find the value of x.