

GEOMETRY (SECTION 5.3)

15. Point C (Angle bisectors)

17. $4x - 1 = 6x - 5$

$4 = 2x$

$x = 2$

16. Point Z (Angle bisectors)

18. $4(x - 3) + 6 = 9(2x - 6)$

$4x - 12 + 6 = 10x - 30$

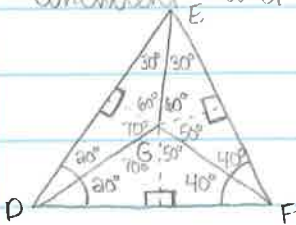
$4x - 6 = 10x - 30$

$24 = 6x$

$x = 4$

19. $\triangle RPT$ is isosceles because the angle bisectors are concurrent and congruent.

22.



$180 = 60 + 2x + x$

$120 = 3x$

$x = 40$

$m\angle DGE = 130^\circ$

$m\angle DGF = 120^\circ$

$m\angle LEGF = 110^\circ$

25. Point P b/c it is the incenter which is equidistant from all 3 sides.

26. False, the circumcenter is equidistant from the vertices.

27. True