

1.1-1.3 PQA

Directions: Please show all work.

- 1) Include the following in one diagram: A right triangle DRE where $R = 90$ degrees, M is a midpoint of segment DR and ray OE and OD are opposite rays.
- 2) Write the slope of a line through the point $(-1/2, 17/3)$ and perpendicular to the line through the points $(5, 13)$ and $(-25, 23)$.
- 3) If A is in between points T and G, and $TA = 7x - 12$ and $TG = 10 - 18x$, find an expression for GA.
- 4) In a football drill, Bayard and Parker start at the same point. When coach AJ blows the whistle, Parker runs backwards 5 yards, then cuts right at a 90 degree angle and runs 3 yards. Simultaneously, Bayard runs forwards (opposite of Parker) 12 yards then cuts left (opposite of Parker) 15 yards. How far of a pass IN FEET must Parker make to Bayard?
- 6) Solve for x. $3|2x - 4| + 5 = 26$