

Name: \_\_\_\_\_

Date: \_\_\_\_\_

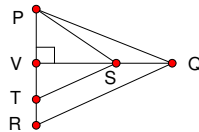
1.  B

2.  D

3.  E

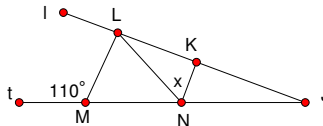
4. Since  $\frac{QS}{QV} = \frac{1}{3}$ , that means  $\frac{SV}{QV} = \frac{2}{3}$ . That means  $QV = \frac{3}{2}SV$  and we also get  $PR = \frac{4}{3}PT$ .

The ratio we're looking for is  $\frac{[PST]}{[PQR]} = \frac{\frac{1}{2}(PT)(SV)}{\frac{1}{2}(PR)(QV)} = \frac{(PT)(SV)}{(PR)(QV)} = \frac{(PT)(SV)}{\frac{4}{3}(PT)\frac{3}{2}(SV)} = \boxed{\frac{1}{2}}$



5.  C

6. Since  $\overline{LN}$  and  $\overline{LM}$  are perpendicular to the same line,  $\overline{JL}$ , that means  $\overline{LN} \parallel \overline{LM}$ .  $\angle LMN = 180 - 110 = 70$  and since  $LN = LM$ ,  $\angle LNM = \angle LMN = 70$ .  $\angle LMN$  and  $\angle KNJ$  are corresponding angles so  $\angle KNJ = 70$ . That leaves  $x = 180 - 70 - 70 = \boxed{40}$



7.  B

8.  A

9.  D

10.  D