

Name Key

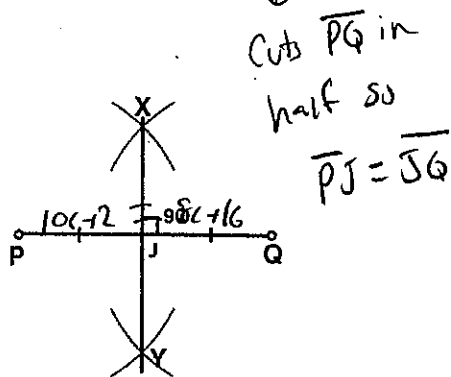
Mrs. Roubos

Date \_\_\_\_\_

8R Period \_\_\_\_\_

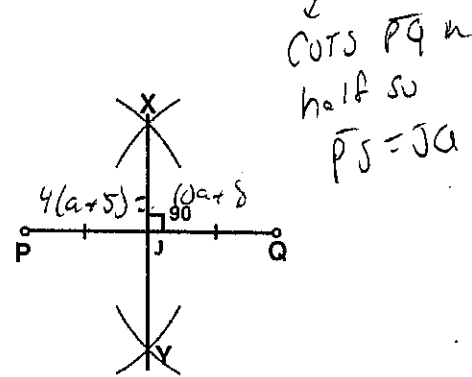
Do Now

1)  $\overline{XY}$  is a perpendicular bisector. Solve for  $c$  if  $\overline{PJ}$  is  $10c + 2$  and  $\overline{JQ}$  is  $8c + 16$



$$\begin{aligned} 10c + 2 &= 8c + 16 \\ -8c &\quad -8c \\ \hline 2c + 2 &= 16 \\ -2 &\quad -2 \\ \hline 2c &= 14 \\ \frac{2c}{2} &= \frac{14}{2} \\ \boxed{c=7} \end{aligned}$$

2)  $\overline{XY}$  is a perpendicular bisector. Solve for  $a$  if  $\overline{PJ}$  is  $4(a + 5)$  and  $\overline{JQ}$  is  $10a + 8$



$$\begin{aligned} 4(a + 5) &= 10a + 8 \\ 4a + 20 &= 10a + 8 \\ -4a &\quad -4a \\ \hline 20 &= 6a + 8 \\ -8 &\quad -8 \\ \hline 12 &= 6a \\ \frac{12}{6} &= \frac{6a}{6} \\ \boxed{a=2} \end{aligned}$$