| Circles in Triangles | Rubric |  |
| :---: | :---: | :---: |
|  | Points | Section points |
| 1. Triangle AOY is congruent to triangle AOX (Hypotenuse - Leg Postulate) | 1 | 1 |
| 2. Triangle COZ is congruent to triangle COX (Hypotenuse - Leg Postulate) $\begin{aligned} & \mathrm{CZ}=\mathrm{CX} \\ & \mathrm{CZ}=\mathrm{CX}=4-r \end{aligned}$ <br> Accept alternative methods | $1$ | 2 |
| 3. Since triangle AOY is congruent to triangle AOX $\begin{aligned} & \mathrm{AY}=\mathrm{AX}=3-r \\ & \text { Since } \mathrm{AC}=\mathrm{AX}+\mathrm{XC} \\ & \quad 5=3-r+4-r \\ & \quad r=1 \end{aligned}$ <br> Accept alternative methods such as using the Pythagorean Rule. | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | 3 |
| 4. Draws in construction lines and uses a similar method to Question \#3, $\begin{gathered} 13=5-r+12-r \\ r=2 \end{gathered}$ | $\begin{aligned} & 1 \\ & 2 \\ & 1 \end{aligned}$ | 4 |
| Total Points |  | 10 |

