

Radius of an Arc or Segment

The radius of an arc or segment is the radius of the circle of which it is a part.

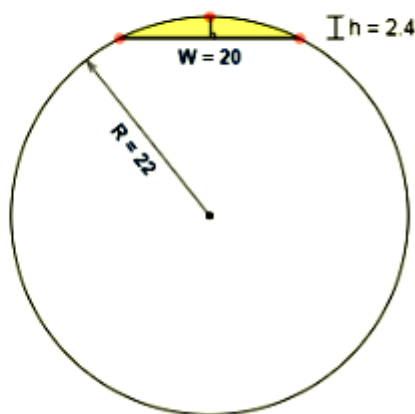
The segment length W is the base of the segment e.g. a straight line between two points on the circumference.

The segment height H is the distance from halfway along the base (at right angle to it) to the circumference.

The formula below calculates the radius of the circle for which the segment forms part of its circumference.

$$r = H/2 + W^2 / 8H$$

$$R = \frac{2.4}{2} + \frac{20.0^2}{8 \times 2.4} = 22.0$$



```
Dim Float r,W,H
Input "Segment length ",W
Input "Segment height ",H
r=H/2+((W^2)/(8*H))
Print "Radius of circle ";r
```

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