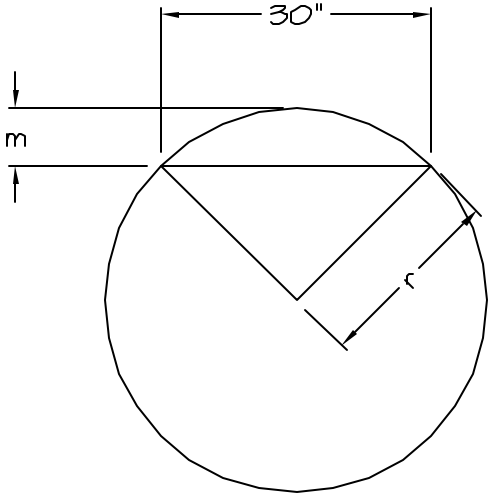
$$m = r - \sqrt{r^2 - \left(\frac{30^2}{4}\right)}$$

All units must be the same (ie inch/mm)



I only use 30" because that is how long I make my rails for the router jig.

Making the radius = 28 feet (336 inchs)

$$m = 336 - \sqrt{336^2 - \left(\frac{30^2}{4}\right)}$$

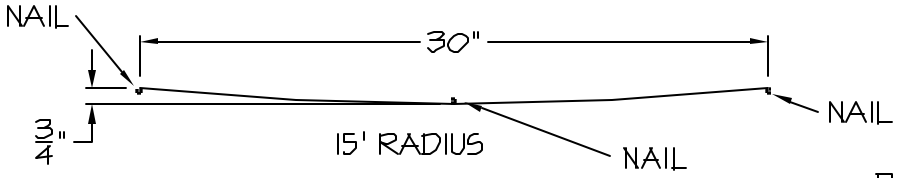
$$m = 336 - \sqrt{112896 - \left(\frac{900}{4}\right)}$$

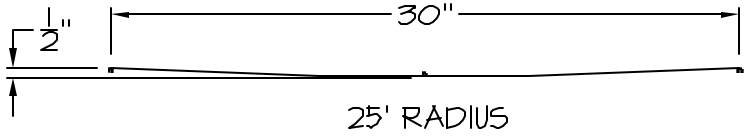
$$m = 336 - \sqrt{112896 - 225}$$

$$m = 336 - \sqrt{112671}$$

$$m = 336 - 335.665$$

m= 0.335 in or between 21/64 & 11/32





Bob, I make the arc the same way as Bob Burton. Here is my explanation.

Place 2 nails 30" apart as shown. Draw a straight line between them. Find the center (15") and draw a line perpendicular to the first down 1" or so. Measure down your new "m" value and place the nail half of its own diameter and the thickness of your spline up from that measured amount. This allows for a more accurate arc. Just make sure that the bottom of the spline is the measured distance and you can't go wrong. Now place your spline so it is wedged inbetween the nails as shown to the left. Now draw your arc.