

## Circle Dilemma Bonus Problem

Fill in the missing angles for circle P given the following:

chord  $AB \cong$  chord  $CD$ ; chord  $GB \parallel$  chord  $CD$ ; segments  $GB$  and  $AF$  are diameters;  $\angle KEA = 90^\circ$ ;  $I, H,$  and  $A$  are all points of tangency; arc  $BD \cong$  arc  $DF$ ;  $m$  of arc  $CH = 22^\circ$ ;  $m$  of arc  $BD = 35^\circ$ ;  $m$  of arc  $AB = 110^\circ$ ;  $m$  of arc  $IJ = 15^\circ$ ;  $\angle 6 = 10^\circ$

$\angle 1 =$

$\angle 21 =$

$\angle 2 =$

$\angle 22 =$

$\angle 3 =$

$\angle 23 =$

$\angle 4 =$

$\angle 24 =$

$\angle 5 =$

$\angle 25 =$

$\angle 6 =$

$\angle 26 =$

$\angle 7 =$

$\angle 27 =$

$\angle 8 =$

$\angle 28 =$

$\angle 9 =$

$\angle 29 =$

$\angle 10 =$

$\angle 30 =$

$\angle 11 =$

$\angle 31 =$

$\angle 12 =$

$\angle 32 =$

$\angle 13 =$

$\angle 33 =$

$\angle 14 =$

$\angle 34 =$

$\angle 15 =$

$\angle 35 =$

$\angle 16 =$

$\angle 36 =$

$\angle 17 =$

$\angle 37 =$

$\angle 18 =$

$\angle 38 =$

$\angle 19 =$

$\angle 39 =$

$\angle 20 =$

$\angle 40 =$