

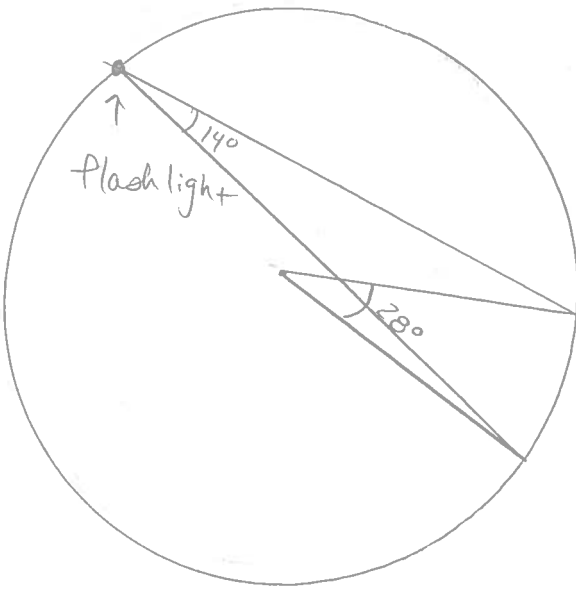
# Circle Geometry - Key

• Exploring angles in a circle.

a)  $\angle ADB = 41^\circ$        $\angle AEB = 41^\circ$

b)  $\overline{AB} = 17\text{cm}$

c)



d)  $\angle KLM = 18^\circ$

$\angle JKL = 26^\circ$

$\angle JCL = 52^\circ$

$\angle KCM = 36^\circ$

e)  $x = 38^\circ$

$y = 52^\circ$

$x = 60^\circ$

$y = 120^\circ$

f)  $x = 9$

$x = 16$

• Chord Properties

a)  $\overline{CE} = 9.99\text{cm}$

b)  $\overline{LK} = 21.6\text{cm}$

• Tangents to a circle

a)  $\angle BDC = 90^\circ$   
 $\angle DCE = 156^\circ$   
 $\triangle CDE = \text{isosceles}$   
 $\angle DEC = 12^\circ$

b)  $\overline{BD} = 16.5 \text{ cm}$   
 $\overline{BE} = 8.2 \text{ cm}$   
 $\angle BED = 90^\circ$   
 $\overline{DE} = 14 \text{ cm}$

c)  $x = 26 \text{ m}$

$x = 14 \text{ cm}$