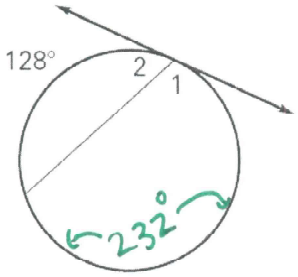
10.5

NAME Key DATE _____ PERIOD _____

Skills Practice

Secants, Tangents, and Angle Measures

1.

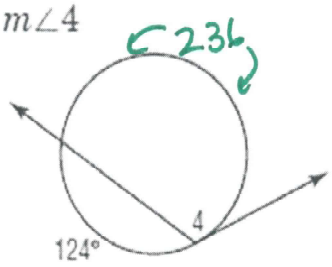


$\angle 2 = \frac{1}{2}(128) = 64°$

$\angle 1 = \frac{1}{2}(360 - 128)$

$\frac{1}{2}(232°) = 116°$

2. $m\angle 4$



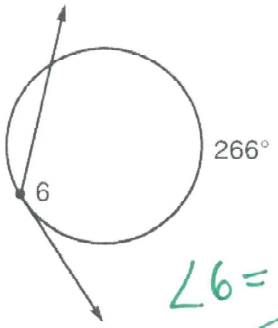
360 − 124 = 236

$\angle 4 = \frac{1}{2}(360 - 124)$

$= \frac{1}{2}(236)$

$= 118°$

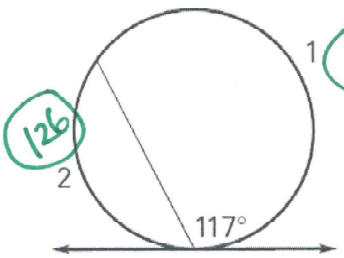
3. $m\angle 6$



$\angle 6 = \frac{1}{2}(266)$

$= 133°$

4.

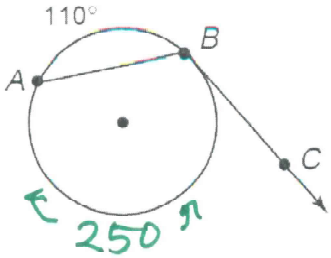


360 − 234 = 126

arc 1 = 2(117) = 234°

arc 2 = 360 − 234 = 126°

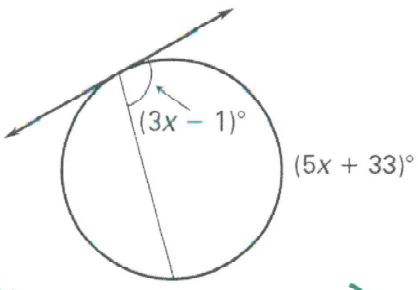
5. $\angle ABC$



360 − 110 = 250

$\angle ABC = \frac{1}{2}(250) = 125°$

6.



$2 \cdot (3x - 1) = \frac{1}{2}(5x + 33) \cdot 2$

$6x - 2 = 5x + 33$

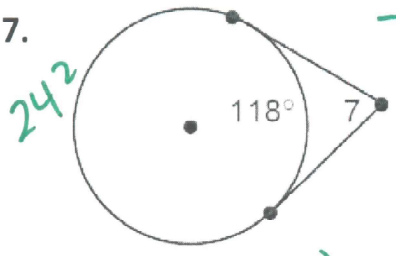
$-5x \quad -5x$

$x - 2 = 33$

$+2 \quad +2$

$x = 35$

7.



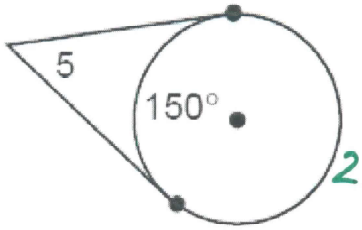
360
−118

$\angle = \frac{1}{2}(B - L)$

$\angle = \frac{1}{2}(242 - 118)$

$\angle = \frac{1}{2}(124) = 62°$

8.



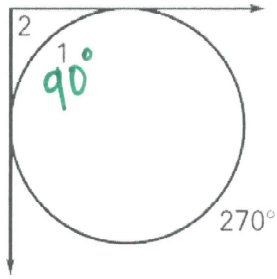
360
−150
210

$\angle = \frac{1}{2}(\text{big} - \text{little})$

$\angle = \frac{1}{2}(210 - 150)$

$\angle = \frac{1}{2}(60) = 30°$

9.



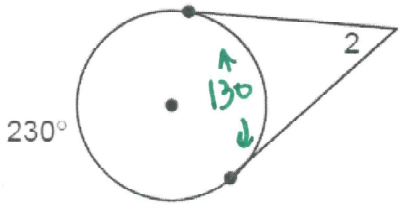
360
−270
90

$\angle = \frac{1}{2}(\text{Big} - \text{little})$

$\angle = \frac{1}{2}(270 - 90)$

$\frac{1}{2}(180) = 90°$

10.



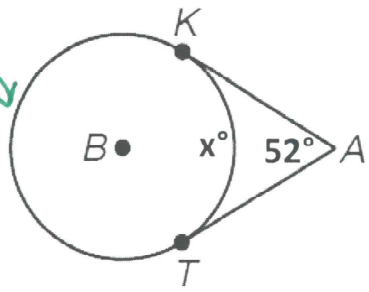
360
−230
130

$\angle = \frac{1}{2}(\text{big} - \text{little})$

$\frac{1}{2}(230 - 130)$

$= \frac{1}{2}(100) = 50°$

11.



360
−x

$\angle = \frac{1}{2}(B - L)$

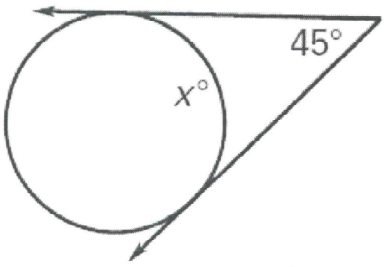
$52 = \frac{1}{2}(360 - x - x)$

$52 = \frac{1}{2}(360 - 2x)$

$52 = 180 - x$ $\quad -128 = -x$

$-180 \quad -180$ $\quad 128° = x$

12.



360
−x

$\angle = \frac{1}{2}(\text{big} - \text{little})$

$45 = \frac{1}{2}(360 - x - x)$

$45 = \frac{1}{2}(360 - 2x)$

$45 = 180 - x$

$-180 \quad -180$

$-135 = -x$ $\quad x = 135°$