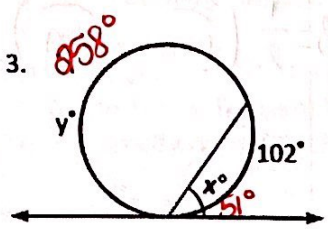
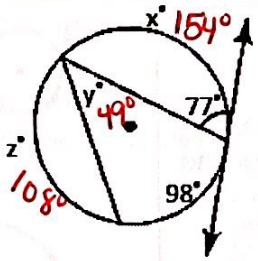
Day 5 – Angle Relationships (Vertex On, Inside & Outside) – Practice

1)



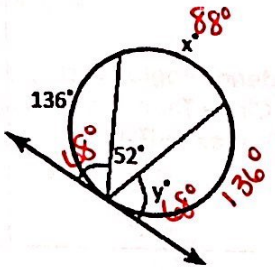
x = 51° y = 258°

2)



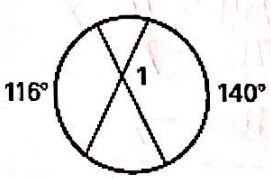
x = 154° y = 49° z = 108°

3)



x = 88° y = 68°

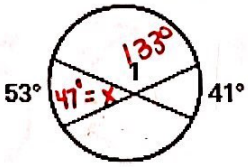
4) Solve for Angle 1. Two Chords



$\angle 1 = \frac{1}{2}(116+140)$

$\angle 1 = 128°$

5) Solve for Angle 1. Two Chords

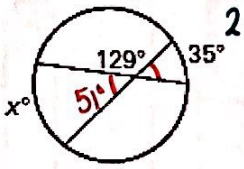


$x = \frac{1}{2}(41+53)$

$x = 47°$

$\angle 1 = 133°$

6) Solve for x. Two Chords

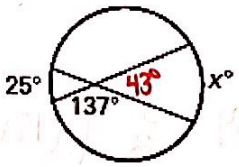


$2 \cdot 51 = \frac{1}{2}(x+35)$ (2.)

$102 = x + 35$

$x = 67°$

7) Solve for x. Two Chords

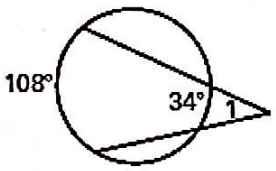


$2 \cdot 43° = \frac{1}{2}(25+x)$ (2.)

$86 = 25 + x$

$x = 61°$

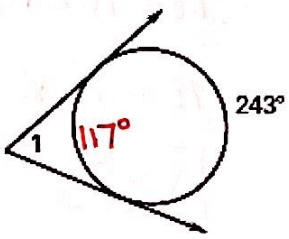
8) Solve for Angle 1. Two Secants



$\angle 1 = \frac{1}{2}(108-34)$

$\angle 1 = 37°$

9) Solve for Angle 1. Two Tangents

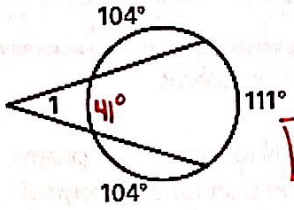


$\angle 1 = \frac{1}{2}(243-117)$

$\angle 1 = 63°$

Two Secants

10) Solve for Angle 1.

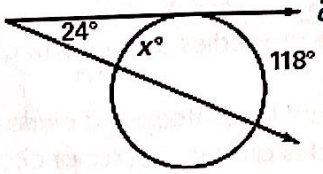


$\angle 1 = \frac{1}{2}(111-41)$

$\angle 1 = 35°$

Secant & Tangent

11) Solve for x.



2. $24 = \frac{1}{2}(118 - x)$

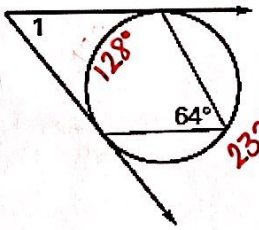
$48 = 118 - x$

$-70 = -x$

$x = 70°$

Two Tangents

12) Solve for Angle 1.

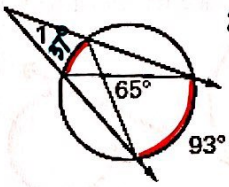


$\angle 1 = \frac{1}{2}(232-128)$

$\angle 1 = 52°$

Two Chords & Two Secants

13) Solve for Angle 1.



2. $65 = \frac{1}{2}(93+x)$

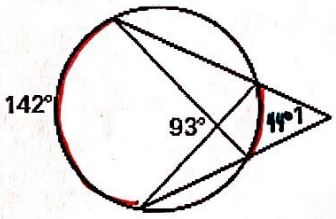
$130 = 93 + x$

$x = 37°$

$\angle 1 = \frac{1}{2}(93-37)$

$\angle 1 = 28°$

14) Solve for Angle 1. Two Chords & Two Secants



2. $93 = \frac{1}{2}(142 + x)$

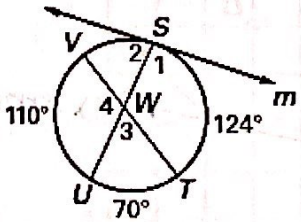
$186 = 142 + x$

$x = 44$

$\angle 1 = \frac{1}{2}(142 - 44)$

$\angle 1 = 49°$

15) Find the measure of all numbered angles.



$\angle 1 = 180 - \angle 2 = 180 - 55 = 125°$

$\angle 2 = \frac{1}{2}(110) = 55°$

$\angle 3 = 180 - \angle 4 = 180 - 117 = 63°$

$\angle 4 = \frac{1}{2}(110 + 124) = 117°$