Using Algebra to Find Missing Angle Measures
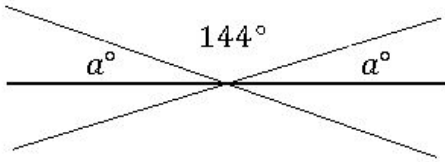
NAME_____
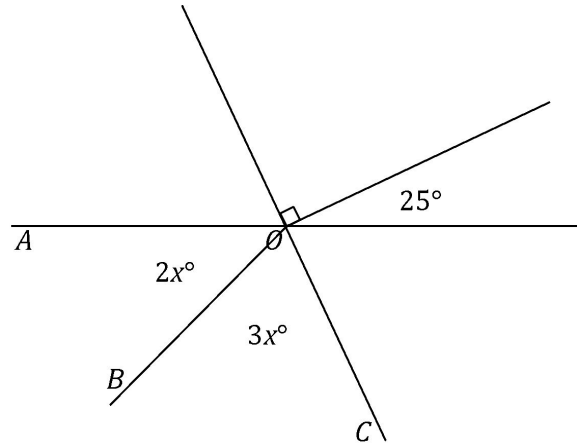
Write an equation to find the missing angle measures.

1.

$144°$

$a°$ $a°$

xr= _____   = _____

2.

A

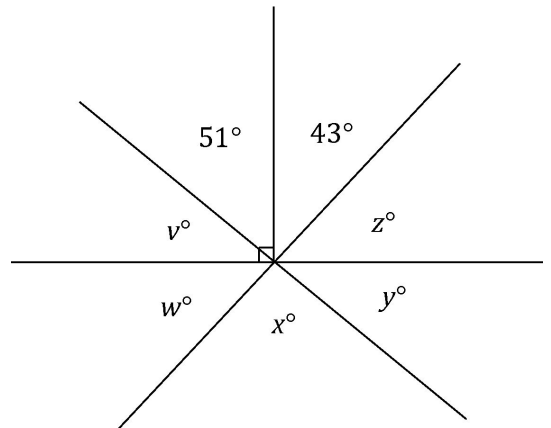$25°$

$2x°$

$3x°$

B

C

O

x = _____   y = _____

3. Three lines meet at a point that is also the endpoint of a ray. Set up and solve an equation to find the value of each variable in the diagram.
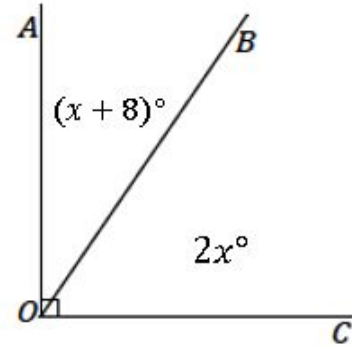
V = _____

W = _____

X = _____

Y = _____

$51°$ $43°$

$v°$ $z°$

$w°$ $y°$

$x°$

4. Set up and solve an equation to find the value of x. Find the measurement of $\angle AOB$ and of $\angle BOC$.

$\angle AOB =$ _____ $\angle BOC =$ _____

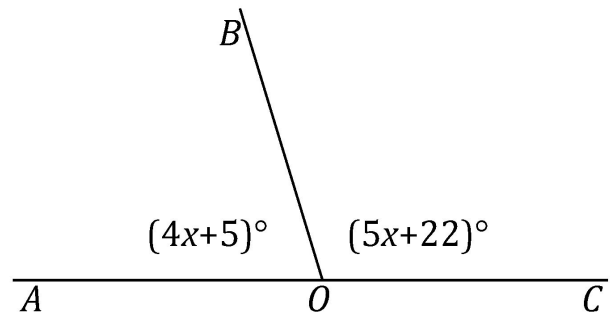5. Set up and solve an equation to find the value of x. Find the measurement of $\angle AOB$ and of $\angle BOC$.

$\angle AOB =$ _____ $\angle BOC =$ _____

6. Write a verbal problem that models the following diagram. Then, solve for the two angles.