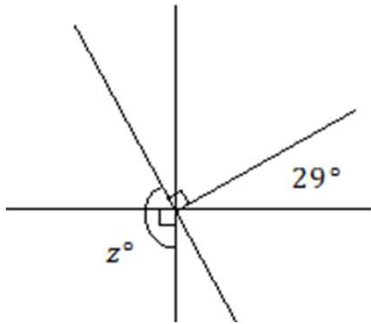
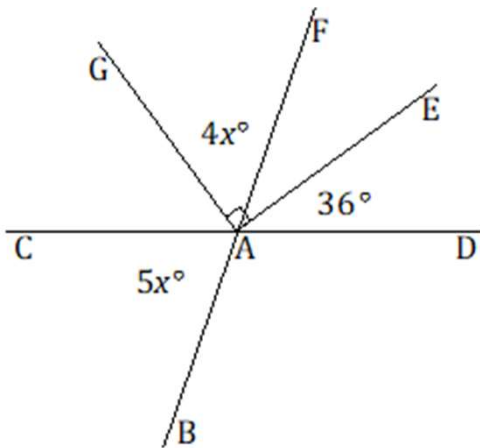


Angle Word Problems Worksheets

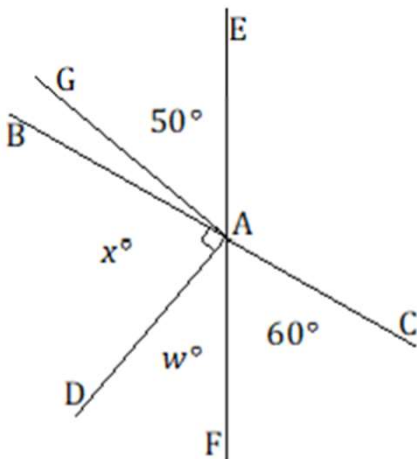
1. Set up and solve an equation to find the value of z .



2. Set up and solve an equation to find the value of x . Find the measurements of $\angle GAF$ and $\angle BAC$.

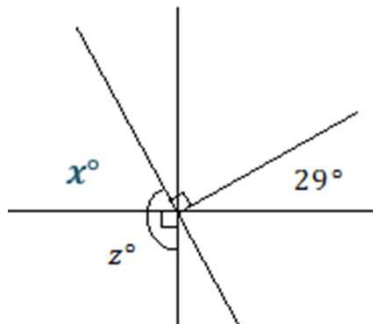


3. Set up and solve an equation to find the values of x and w .



Angle Word Problems Worksheets

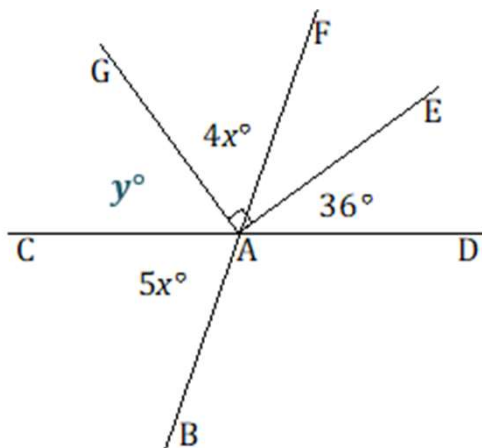
1. Set up and solve an equation to find the value of z .



Let x° be the measurement of the indicated angle.

$$\begin{aligned} x + 90 + 29 &= 180 \\ x + 119 &= 180 \\ x + 119 - 119 &= 180 - 119 \\ x &= 61 \\ z &= x + 90 \\ z &= 61 + 90 \\ z &= 151 \end{aligned}$$

2. Set up and solve an equation to find the value of x . Find the measurements of $\angle GAF$ and $\angle BAC$.



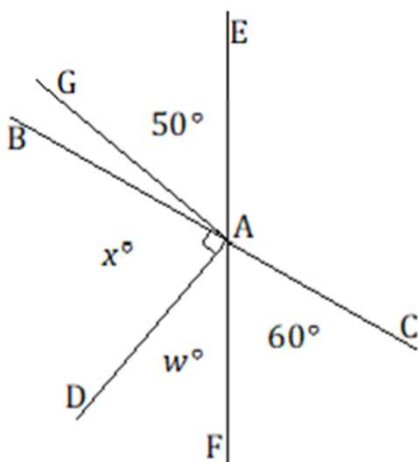
Let y° be the measurement of the indicated angle.

$$\begin{aligned} y &= 180 - (90 + 36) \\ y &= 54 \\ 4x + y + 5x &= 180 \\ 4x + 54 + 5x &= 180 \\ 9x + 54 &= 180 \\ 9x + 54 - 54 &= 180 - 54 \\ 9x &= 126 \\ \left(\frac{1}{9}\right)9x &= \left(\frac{1}{9}\right)126 \\ x &= 14 \end{aligned}$$

The measurement of $\angle GAF$: $4(14)^\circ = 56^\circ$

The measurement of $\angle BAC$: $5(14)^\circ = 70^\circ$

3. Set up and solve an equation to find the values of x and w .



$$\begin{aligned} \angle BAE &= 90 \\ \angle BAG &= 10 \\ x + \angle BAG &= 90 \\ x + 10 &= 90 \\ x + 10 - 10 &= 90 - 10 \\ x &= 80 \\ x + w + 60 &= 180 \\ 80 + w + 60 &= 180 \\ 140 + w &= 180 \\ 140 + w - 140 &= 180 - 140 \\ w &= 40 \end{aligned}$$