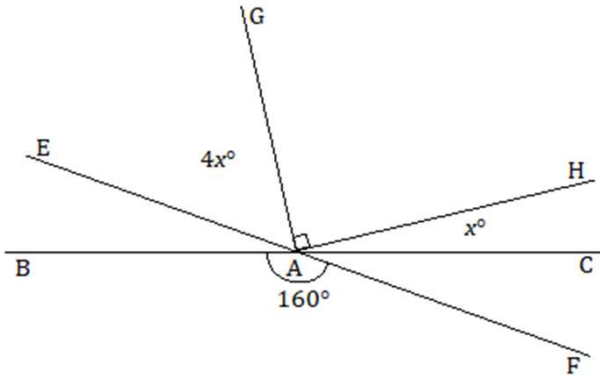
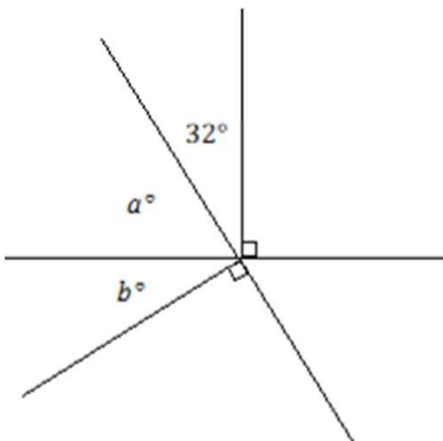


Angle Word Problems Worksheets

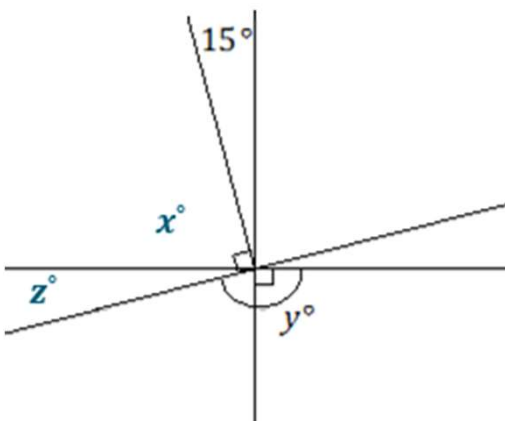
1. Set up and solve an equation to find the value of x . Find the measurements of $\angle CAH$ and $\angle EAG$.



2. Set up and solve an equation to find the values of a and b .

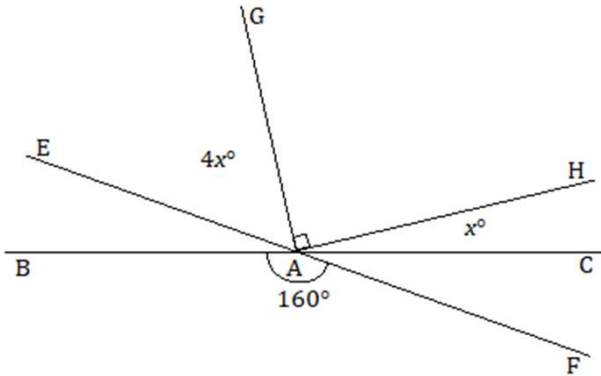


3. Set up and solve an equation to find the value of x , y , z .



Angle Word Problems Worksheets

1. Set up and solve an equation to find the value of x . Find the measurements of $\angle CAH$ and $\angle EAG$.

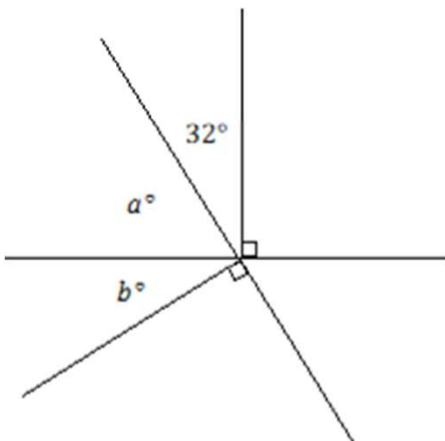


$$\begin{aligned}
 4x + 90 + x &= 160 \\
 5x + 90 &= 160 \\
 5x + 90 - 90 &= 160 - 90 \\
 5x &= 70 \\
 \left(\frac{1}{5}\right) 5x &= \left(\frac{1}{5}\right) 70 \\
 x &= 14
 \end{aligned}$$

The measurement of $\angle CAH$: 14°

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

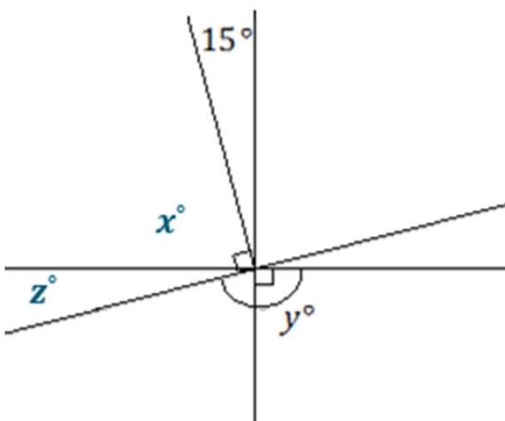
2. Set up and solve an equation to find the values of a and b .



$$\begin{aligned}
 a + 32 + 90 &= 180 \\
 a + 122 &= 180 \\
 a + 122 - 122 &= 180 - 122 \\
 a &= 58
 \end{aligned}$$

$$\begin{aligned}
 a + b + 90 &= 180 \\
 58 + b + 90 &= 180 \\
 b + 148 &= 180 \\
 b + 148 - 148 &= 180 - 148 \\
 b &= 32
 \end{aligned}$$

3. Set up and solve an equation to find the value of x , y , z .



$$\begin{aligned}
 x + 15 &= 90 \\
 x + 15 - 15 &= 90 - 15 \\
 x &= 75
 \end{aligned}$$

$$\begin{aligned}
 x + z &= 90 \\
 75 + z &= 90 \\
 75 - 75 + z &= 90 - 75 \\
 z &= 15
 \end{aligned}$$

$$\begin{aligned}
 z + y &= 180 \\
 15 + y &= 180 \\
 15 - 15 + y &= 180 - 15 \\
 y &= 165
 \end{aligned}$$