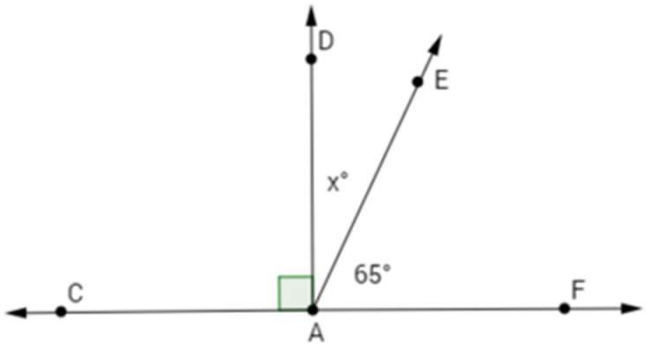
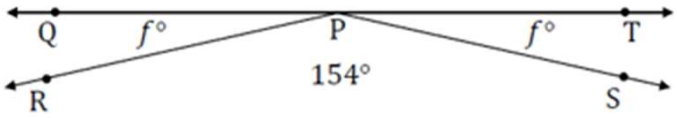
Angle Word Problems Worksheets

For each question, use angle relationships to write an equation in order to solve for each variable. Determine the indicated angles.

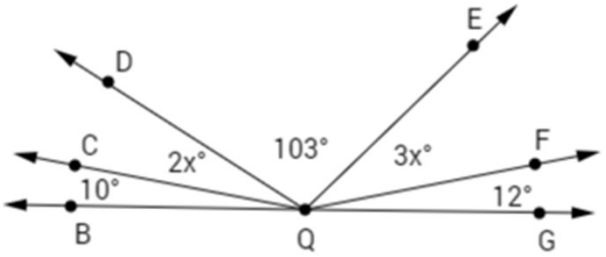
1. Find the measurement of $\angle DAE$.



2. Find the measurement of $\angle QPR$.



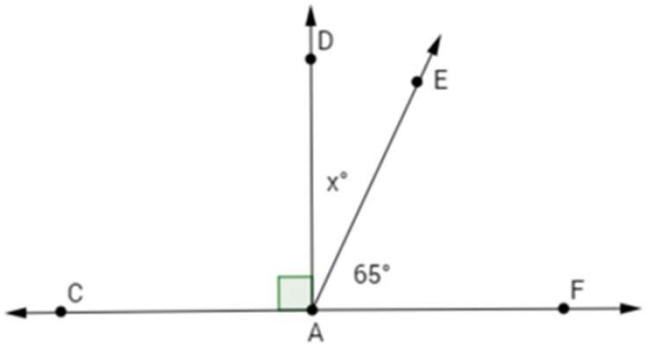
3. Find the measurements of $\angle CQD$ and $\angle EQF$.



Angle Word Problems Worksheets

For each question, use angle relationships to write an equation in order to solve for each variable. Determine the indicated angles.

1. Find the measurement of $\angle DAE$.

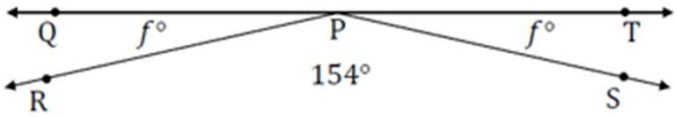


$\angle CAD$, $\angle DAE$, and $\angle FAE$ are angles on a line and their measures sum to $180°$.

$$90 + x + 65 = 180$$
$$x + 155 = 180$$
$$x + 155 - 155 = 180 - 155$$
$$x = 25$$

$$m\angle DAE = 25°$$

2. Find the measurement of $\angle QPR$.

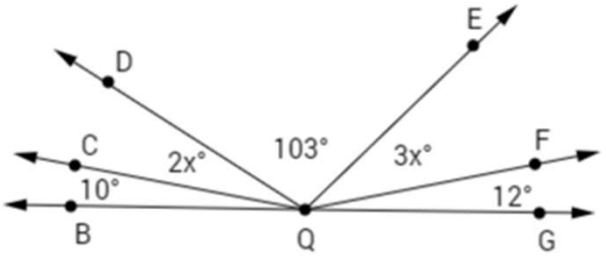


$\angle QPR$, $\angle RPS$, and $\angle SPT$ are angles on a line and their measures sum to $180°$.

$$f + 154 + f = 180$$
$$2f + 154 = 180$$
$$2f + 154 - 154 = 180 - 154$$
$$2f = 26$$
$$\left(\frac{1}{2}\right)2f = \left(\frac{1}{2}\right)26$$
$$f = 13$$

$$m\angle QPR = 13°$$

3. Find the measurements of $\angle CQD$ and $\angle EQF$.



$\angle BQC$, $\angle CQD$, $\angle DQE$, $\angle EQF$, and $\angle FQG$ are angles on a line and their measures sum to $180°$.

$$10 + 2x + 103 + 3x + 12 = 180$$
$$5x + 125 = 180$$
$$5x + 125 - 125 = 180 - 125$$
$$5x = 55$$
$$\left(\frac{1}{5}\right)5x = \left(\frac{1}{5}\right)55$$
$$x = 11$$

$$m\angle CQD = 2(11°) = 22°$$

$$m\angle EQF = 3(11°) = 33°$$