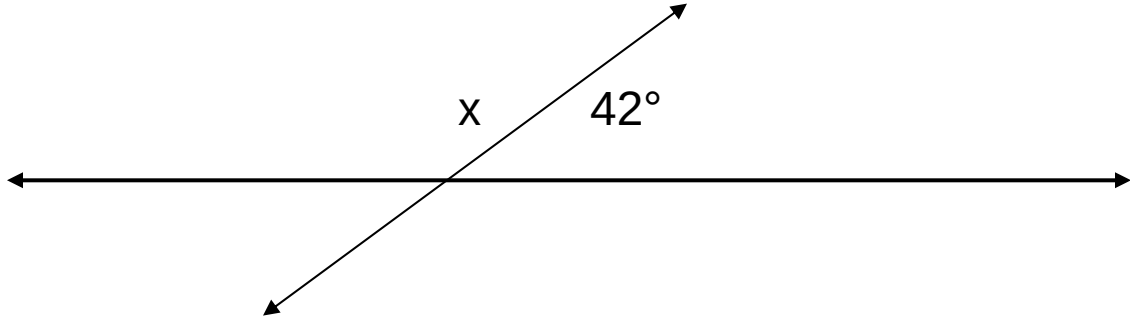


Complementary and Supplementary Angles Guided Lesson Explanation

1.



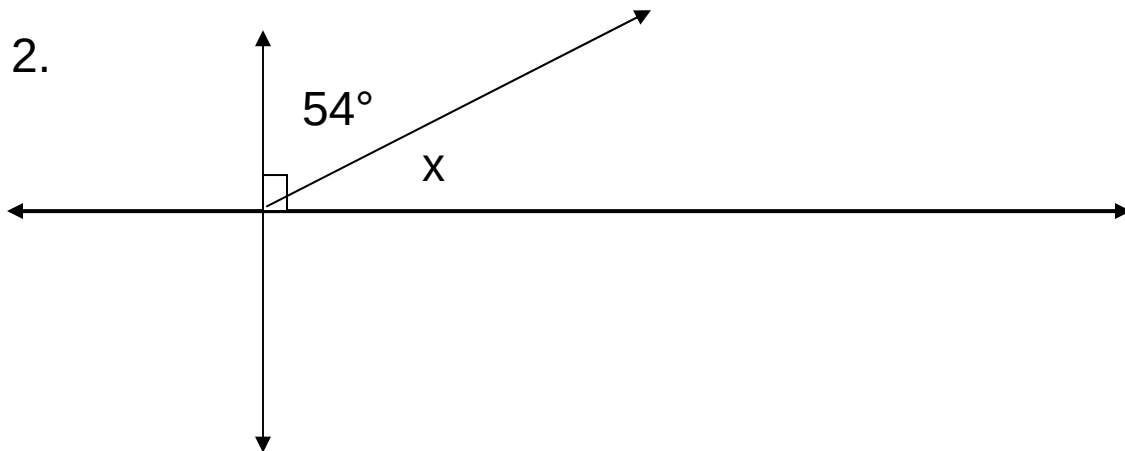
We tell that the missing angle is formed when a diagonal line passes across a perfectly straight horizontal line (given). The resulting angle and the 42° are supplementary. This would mean that:

$$42^\circ + x = 180^\circ$$

$$x = 180^\circ - 42^\circ$$

$$x = 138^\circ$$

2.



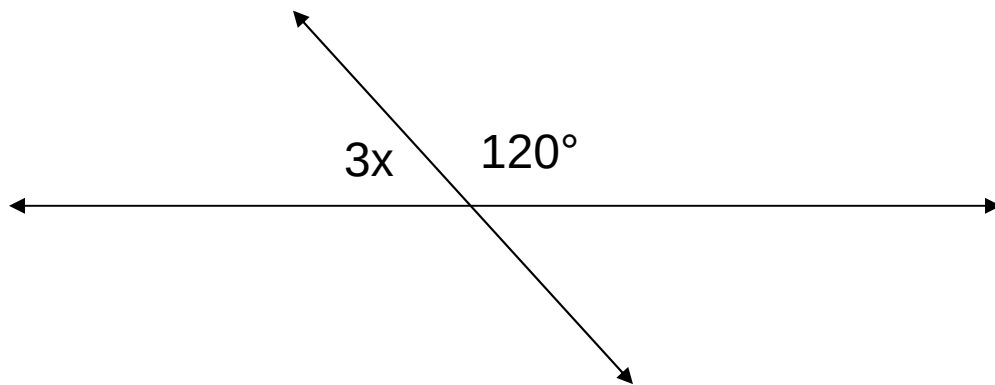
We can see that angle x and the 54° angle are complementary. This means that:

$$54^\circ + x = 90^\circ$$

$$x = 90^\circ - 54^\circ$$

$$x = 36^\circ$$

3.



We tell that the missing angle is formed when a diagonal line passes across a perfectly straight horizontal line (given). The resulting angle and the 120° are supplementary. This would mean that:

$$120^\circ + 3x = 180^\circ \quad \text{This is slightly different in that we need to solve it algebraically.}$$

$$3x = 180^\circ - 120^\circ$$

$$3x = 60^\circ$$

$$x = 60^\circ / 3$$

$$x = 20^\circ$$