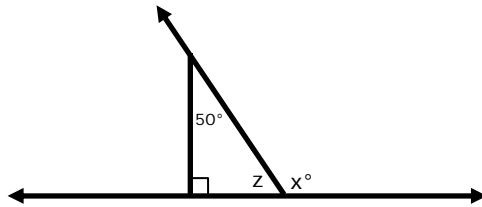


Angles in a Multi-Step Problems - Step-by-Step Lesson**Lesson 1 Angles Problem:**

Write and solve an equation to find the measure of angle x .

**Explanation:**

Things we need to remember.

1. All the interior angles of a triangle have a sum of 180° .
2. Right angles are 90° .
3. Straight angles are 180° .

Step 1) We can find the measure of angle x , if we can find the measure of the angle z . Together they should add up to equal 180° .

Step 2) Find the measure of angle z . We know that the two other interior angles of the triangle add up to equal 140° ($90^\circ + 50^\circ$)

So it follows that angle $z = (180^\circ - 140^\circ) = 40^\circ$.

Step 3) Together angle $z + x = 180^\circ$

So it follows suit that: 180° (Straight Angle) - 40° (z) = 140° (x)

The answer is 140° .

