

The measure of an angle's supplement is 76 less than the measure of the angle. Find the measure of the angle and its supplement.

Solution. Let x be the measure of the angle, then $x - 76$ is the measure of its supplement. Thus we obtain

$$x + x - 76 = 180$$

$$2x = 256$$

$$x = 128$$

Hence, the angle's measure is 128.

Answer. The angle's measure is 128.