

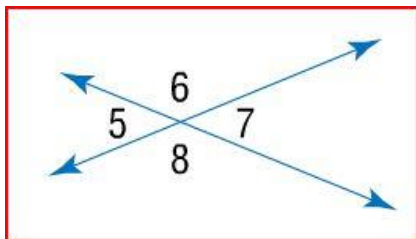
Answer on Question #43638 – Math - Geometry

Find the measure of Angle 5.

Measure of angle 7 = $2x+15$

Measure of angle 8 = $3x$

Solution



Angle 7 and 5 are vertical angles, so they're equal.

Angles 7 and 8 are supplementary, so they have to add up to 180.

$$2x + 15 + 3x = 180 \rightarrow x = 33.$$

The measure of Angle 5 is

$$2x + 15 = 2 \cdot 33 + 15 = 81.$$

Answer: 81.