Sulfur and oxygen form both sulfur dioxide and sulfur trioxide. When samples of these are decomposed, the sulfur dioxide produces 3.58 g oxygen and 3.59 g sulfur, while the sulfur trioxide produces 9.00 g oxygen and 6.00 g sulfur. Calculate the mass of oxygen per gram of sulfur for sulfur dioxide

3.58 g oxygen - 3.59 g sulfur

X g oxygen - 1 g sulfur

X g oxygen = 3.58 g oxygen*1 g sulfur / 3.59 g sulfur = 0.997 g

Answer provided by www.AssignmentExpert.com