

P12 - 5.3 - Momentum Trig HMK

A Pool Player shoots the Cue Ball with a mass of 0.2 kg with a velocity of $24 \frac{m}{s}$ at the Eight Ball with a mass of 0.15 kg at Rest. The Cue Ball deflects at a velocity of $18 \frac{m}{s}$ at an angle of 57° above the horizontal and the Eight ball deflects at an angle below the horizontal. What is the velocity of the and angle of the Eight ball.

A Pool Player shoots the Cue Ball with a mass of 0.2 kg with a velocity of $13 \frac{m}{s}$ at the Eight Ball with a mass of 0.15 kg at Rest. The Cue Ball deflects at a velocity of $9 \frac{m}{s}$ at an angle of 52° above the horizontal and the Eight ball deflects at an angle below the horizontal. What is the velocity of the and angle of the Eight ball.