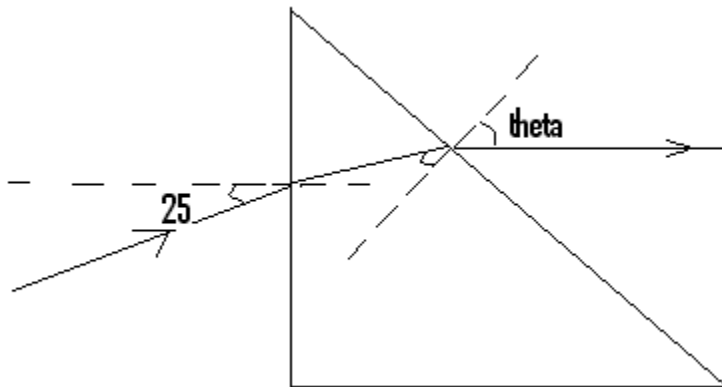


Refractive Index (prism)

Shine a light into a 45-45-90 degree prism at an angle of 25 degrees as shown below. Use a refractive index of 1.5 for glass, and predict the angle that the light will leave the glass, θ (theta). (You will need to calculate the angle off perpendicular after the light enters the glass, and use geometry to find the angle off perpendicular that the light will hit the surface leaving the glass, and then calculate theta.) Once the calculations are close, I will give you a light to test your prediction.



Please write this neatly and explain things carefully. 10 points are possible, but neat and clear write-ups are required for 10 points.