



# Explaining Rainbows

Even without a pot of gold at the end, rainbows are still pretty fascinating. The details of how they form are fascinating, too. Light is refracted upon entering and exiting raindrops, and reflected within raindrops, sometimes more than once. The angle of refraction and thus the position of the rainbow—not a fixed place but at an angle of elevation of about 42 degrees from the line connecting your eye to your head's shadow—can be figured out using trigonometry. Because different colors of light have different wavelengths, they are refracted at different angles, which produces a rainbow (or two).



Image: Eric Rolph at English Wikipedia

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