Figure IX.5: The usual setup for reflection rays in basic recursive ray tracing. The vector $\mathbf{v}$ points in the direction opposite to the incoming ray. The direction of perfect reflection is shown by the vector $\mathbf{r}_v$. The vector $\ell$ points to a point light source. $I$ is the outgoing light intensity as seen from the direction given by $\mathbf{v}$. $I_{reflect}$ is the incoming light from the reflection direction $\mathbf{r}_v$. $I^{in}$ is the intensity of the light from the light source. (Compare this to figure III.7 on page 72.)