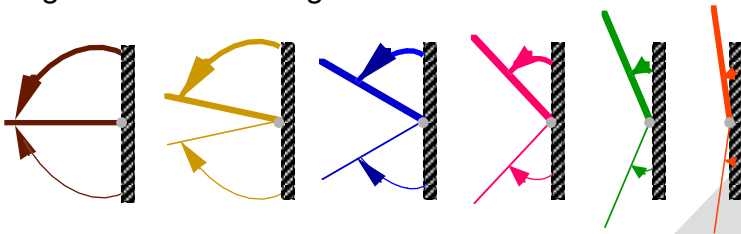


Figure 5 at the right shows my data sheet. How do I make sense of these data? Perhaps I need to think about angles -- the angle between the incident light and the mirror and the angle between the reflected light and the mirror. Figure 6 shows what these angles look like for each position of the laser.



Fig. 5. Reflection of light data sheet

Figure 6. Views of light reflected from a mirror.



Looking at Figure 6, it seems that the angle between the incident light and the mirror and the angle between the reflected light and the mirror were the same! My next step was to measure the angles, which I recorded in the table below.

Table 1	Angle of Incident Light Ray	Angle of Reflected Light Ray
Brown	90 <sub>i</sub>	90 <sub>i</sub>
Yellow	77 <sub>i</sub>	78 <sub>i</sub>
Blue	60 <sub>i</sub>	60 <sub>i</sub>
Purple	45 <sub>i</sub>	43 <sub>i</sub>
Green	24 <sub>i</sub>	24 <sub>i</sub>
Orange	9 <sub>i</sub>	8 <sub>i</sub>

Although the data from each angle of the laser were not exactly equal for the incident and reflected light, I thought they were close enough to consider them the same. Thus, I made the following claim:

¥ When light strikes a mirror, the angle of the incident light (to the mirror) equals the angle of the reflected light (from the mirror).