**Noteguide for Intensity and Amplitude (Videos 12D1) Name**

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**Whiteboards**

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| 1. Three narrow slits close together are illuminated by light. The intensity at the center of the three on a distant screen is 23.8 μW m-2 due to the light from one of the slits. What is the intensity if all three constructively interfere at the center?(2.14x10-4 W m-2) | 2. A number of narrow slits close together are illuminated by light. When only one of the slits illuminates the screen, the central bright spot has an intensity of Io. When all of the slits illuminate the screen, the intensity is 25Io in the center.. How many slits are there?(5) |
| 3. Light from a heat lamp has an intensity of 467 W m-2. If we were to double the amplitude of the light wave, what would be its intensity?(1868 W m-2) |