

### Exam 3 Cheat Sheet

Speed of light in a vacuum:

$$c = \frac{E}{B} = 3.0 \times 10^8 \text{ m/s} \quad (\text{in a vacuum})$$

Speed of light where  $n$  is the index of refraction:

$$v = \frac{c}{n} \quad (\text{speed of light})$$

Law of refraction:

$$n_1 \sin \theta_1 = n_2 \sin \theta_2 \quad (\text{Snell's Law})$$