Honors Physics Mr. McMullen

Name _____ Date _____ Period_____

REVIEW

EXAMPLE

Rewriting Equations

Solve the following equation for r.

$$\frac{q}{m} = \frac{2\,V}{B^2r^2}$$

Multiply both sides of the equation by mB^2r^2.

$$qB^2r^2 = 2\,Vm$$

Divide both sides by qB^2.

$$r^2 = \frac{2\,Vm}{qB^2}$$

Take the square root of both sides.

$$r = \sqrt{\frac{2\,Vm}{qB^2}} = \frac{1}{B}\sqrt{\frac{2\,Vm}{q}}$$

Problems

Solve the following equations for the variable(s) requested.

1. $E = 1/2\ mv^2$ for m and v.

2. $E = mgh$ for h

3. $\frac{1}{f} = \frac{1}{d_o} + \frac{1}{d_i}$ for d_o

4. $\frac{s_o}{s_i} = \frac{d_o}{d_i}$ for s_i

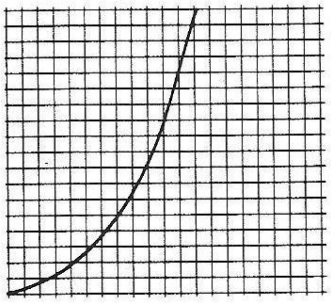
5. $P = \frac{Fd}{t}$ for d

6. $E = hf - W_o$ for W_o and h

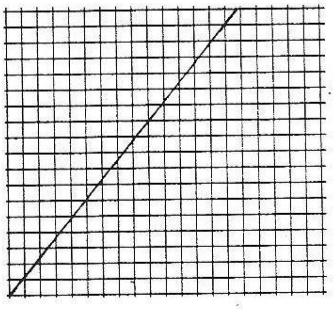
7. $\frac{r}{n^2} = \frac{h^2}{4\pi^2 kmq^2}$ for q

8. Answer the questions on the next page about the graphs below.

I



II



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