

October 12, 2012

Section 6.6

①

$$\frac{1}{r} = \frac{1}{r_1} + \frac{1}{r_2}$$

Solve for r

$$\text{LCD} : r \cdot r_1 \cdot r_2$$

$$r_1 \cdot r_2 = r \cdot r_2 + r \cdot r_1$$

$$r_1 r_2 = r (r_2 + r_1)$$

$$\frac{r_1 r_2}{r_2 + r_1} = r$$

λ	lambda
θ	theta
ω	Omega

②

$$\frac{\theta}{\omega} = \frac{2L}{c} \quad \text{for } c$$

$$c = 2L\omega$$

$$c = \frac{2L\omega}{\theta}$$

$$\text{LCD} = 12x$$

③ Work problem

	days
Mr. D	4
Son	6
together	x

$$\frac{1}{4} + \frac{1}{6} = \frac{1}{x}$$

$$3x + 2x = 12$$

$$5x = 12$$

$$x = \frac{12}{5}$$

$$x = 2 \frac{2}{5} \text{ days} \checkmark$$