

## 6-2 Unit Rates

$$a.) \frac{160 \text{ characters}}{40 \text{ seconds}} = \frac{4 \text{ characters}}{1 \text{ second}}$$

$$\frac{4 \text{ char.}}{1 \text{ sec}} > \frac{3.791 \text{ d}}{1 \text{ sec}}$$

$$b.) \frac{160 \text{ ch.}}{42.2 \text{ sec}} = \frac{3.791 \text{ char.}}{1 \text{ second}}$$

Rate - compares two quantities w/ different units

Unit Rate - simplified  
denominator is 1

$$\frac{\text{cost}}{\text{song}} \text{ per } \quad \frac{\text{mi}}{\text{hr}} \text{ per.}$$

$$\frac{\$5.76}{807} \circ \frac{\$8.88}{1202}$$
$$\frac{\$0.72}{102} < \frac{\$0.74}{102}$$

better buy  
cheaper = less expensive  
less than

$$\frac{195 \text{ doughnuts}}{3 \text{ hours}} = \frac{65 \text{ doughnuts}}{1 \text{ hour}}$$

$$65 \cdot 8 = \frac{520 \text{ doughnuts}}{8 \text{ hours}}$$

Ratio

- comparing by division
- same unit

Rate

- comparing by division
- different units

Unit Rate

- comparing by division
- different units
- denominator is 1

Always  
Reduce  
Simplify