

§6.4 Optimization Problems: Creating the Model

Example (p.321)

Let  $x$  be the amount of heating oil produced (L)  
 $y$  be the amount of gas produced (L)

Restrictions (like your domain & range)

Assume:  $x \in \mathbb{R}, x \geq 0$   
 Range:  $y \in \mathbb{R}, y \geq 0$

Constraints:

$$y \geq 2x$$

$$x \leq 9\,000\,000$$

$$y \leq 6\,000\,000$$

Objective Function:

$$R = 1.75x + 1.10y$$

(Revenue)

TO DO

- ① Summary (p.321)
- ② C4U (p.350)
- ③ Practice (p.370 - 371 / 3-7)

Nov 17-10:18 AM