## **Joint-Product Costing**

 $p_A := 98$ 

Selling price product A

 $p_B := 107$ 

Selling price product B

 $x_A := 2100$ 

Quantity of goods produced and quantity of goods sold A

 $x_B := 4000$ 

Quantity of goods produced and quantity of goods sold B

C := 566885

Joint costs

Residual value method

Product A = Main product

$$c_A \coloneqq \frac{C - p_B \cdot x_B}{x_A}$$

Cost per unit product A

$$c_A = 66.136$$

$$c_B := p_B$$

Cost per unit product B

$$c_B = 107$$

Product B = Main product

$$c_B := \frac{C - p_A \cdot x_A}{x_B}$$

Cost per unit product B

$$c_B = 90.271$$

$$c_A := p_A$$

Cost per unit product A

$$c_A = 98$$

Proportional value method

$$c_A \coloneqq \frac{C}{p_A \cdot x_A + p_B \cdot x_B} \cdot p_A$$

Cost per unit product A

$$c_A = 87.653$$

$$c_{B} \coloneqq \frac{C}{p_{A} \cdot x_{A} + p_{B} \cdot x_{B}} \cdot p_{B}$$

Cost per unit product B

$$c_B = 95.703$$