

Solutions

Award method and answer marks as indicated; accept equivalent correct methods.

2.1

- $C = np = 4(3.75) = \mathbf{15.00}$ yuan.

2.2

- $R = 50 - 32.80 = \mathbf{17.20}$ yuan.

2.3

- $Y = 9.2P = 9.2(35) = \mathbf{322.00}$ yuan.

2.4

- $P = Y/9.2 = 460/9.2 = \mathbf{50.00}$ pounds.

3.1

(a)

- $Y = 7.8(80) = \mathbf{624.00}$ yuan.

(b)

- $Y = 624 - 15 = \mathbf{609.00}$ yuan.

(c)

- $Y_2 = 7.6(80) = 608$ yuan. **The first desk gives 1.00 yuan more.**

3.2

(a)

- Desk A: $Y_A = 150(7.85) - 20 = \mathbf{1157.50}$ yuan.
- Desk B: $Y_B = 150(7.72) = \mathbf{1158.00}$ yuan.
- B is better by **0.50 yuan**.

(b)

- Total spending $C = 2(86.50) + 42.80 = 215.80$ yuan.
- Remaining $R = 1158.00 - 215.80 = \mathbf{942.20}$ yuan.
- A third ticket can be bought, since 942.20 is greater than 86.50.