

E1.16 Money

Name: _____ Class: _____ Date: _____

Total: 12 marks**KEY WORDS** exchange rate 汇率 • currency 货币 • overtime 加班 • wage 工资 • convert 换算

Objective

Build the skills to answer Extended exam questions on **money** 金钱 — calculating with **currency** 货币 amounts, **converting between currencies** 货币换算 using an **exchange rate** 汇率, and working out **wages** 工资 including **overtime** 加班费.

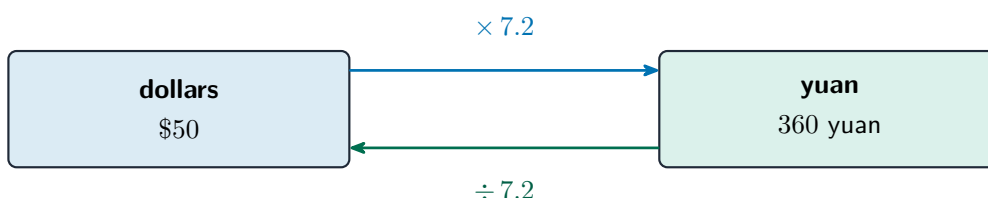
You must be able to:

- convert an amount from one currency to another, in both directions
- decide whether to multiply or divide by the exchange rate
- calculate wages, bills and totals, giving money answers to 2 decimal places

1 Worked examples

■ Decide the direction before touching the calculator

Exchange rate: \$1 = 7.2 yuan



Decide the direction first. Going to the currency the rate counts *per dollar* you multiply; coming back you divide. If the answer comes out far bigger or far smaller than it should, the two were swapped.

The rate is quoted per dollar, so dollars to yuan multiplies

- **Rate \$1 = 7.2 yuan:** dollars → yuan **multiply**; yuan → dollars **divide**. \$50 = 360 yuan and 504 yuan = \$70.
- **Check the size.** If the currency is worth less per unit, the number of them should be bigger. A conversion that makes the number smaller in the wrong direction has been divided instead of multiplied.
- **Money is written to 2 decimal places:** \$27.05, not \$27.5.
- **Overtime:** pay the normal rate up to the normal hours, then the overtime rate

on the extra hours only.

Answer shapes (marked by **method marks** — M1 for a correct method, A1 for the correct answer): the multiplication or division by the rate is the method mark, so write it down even if the calculator does the rest.

2 Practice

The exchange rate is $\$1 = 7.2$ yuan.

2.1 Convert 504 yuan into dollars. [2]

2.2 Convert \$85 into yuan. [1]

2.3 A shop sells 3 items at \$4.75 each and 2 items at \$6.40 each. Find the total cost. [2]

3 Exam-style questions

3.1 The exchange rate is $\$1 = 0.92$ euros.

(a) A camera costs 368 euros. Calculate its cost in dollars. [2]

(b) The same camera costs \$415 in another country. State which is cheaper, and by how much in dollars. [2]

3.2 A worker is paid \$16.50 an hour for a normal week of 38 hours. Any extra hours are paid at \$24.75 an hour. In one week she works 44 hours. Calculate her total pay for that week. [3]

Solutions

Marking: **M1** a correct method, **A1** the correct answer.

Each answer shows the steps, then the **result**.

2.1

- yuan to dollars, so divide by the rate: $504 \div 7.2$

$$= \$\mathbf{70}$$

2.2

- dollars to yuan, so multiply: 85×7.2

$$= \mathbf{612} \text{ yuan}$$

2.3

- $3 \times 4.75 = \$14.25$ and $2 \times 6.40 = \$12.80$

$$14.25 + 12.80 = \$\mathbf{27.05}$$

3.1

(a)

- euros to dollars, so divide: $368 \div 0.92$

$$= \$\mathbf{400}$$

(b)

- compare \$400 with \$415

the camera at 368 euros is **\$15** cheaper

3.2

- normal pay = $38 \times 16.50 = \$627.00$
- overtime hours = $44 - 38 = 6$, so overtime pay = $6 \times 24.75 = \$148.50$

$$627.00 + 148.50 = \$\mathbf{775.50}$$