Grade 10 Math, Explained

# Unit 4 · Currency and Exchange Rate

HARDER WORKSHEET

Full marks 22

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 22

## 1 Find the rates [3]

Solve the following problem. Show your working.

Mina changed Rs 2,55,900 into US dollars at a bank and got exactly \$2,000. The same day she changed \$500 back and got Rs 63,675. Find the bank's selling and buying rates, and what percentage of the selling rate the bank keeps on each dollar.

**Answer:** _____

## 2 Spot the error [2]

Find the mistake in the working and correct it.

A bank buys Japanese yen at ¥10 = Rs 9.58. Ram brings ¥50,000 home and works out what he will get: $50000 \times 9.58$ = Rs 4,79,000.

## 3 Work backwards [3]

Solve the following problem. Show your working.

A trader changed some rupees into US dollars at \$1 = Rs 140. A week later the Nepali rupee was devalued by 5%, and he changed all the dollars back into rupees, making a profit of Rs 70,000. How many rupees did he change at first?

**Answer:** _____

## 4 Is the claim true? [3]

Answer the following question. Show your working.

$1 = Rs 140. A shopkeeper says: "If the rupee is devalued by 10% and then revalued by 10%, the dollar is back to Rs 140." Is he right? What is the rate after both changes?

## 5 A chain of four [3]

Solve the following problem. Show your working.

₹100 = Rs 160, $1 = ₹88 and €1 = $1.16. How many Nepali rupees is €500 worth?

**Answer:**

## 6 Which route? [3]

Answer the following question. Show your working.

Ramesh works in Qatar and is moving to Malaysia with QAR 1,000. A money changer in Doha offers QAR 1 = MYR 1.20. A bank in Nepal buys Qatari riyals at QAR 1 = Rs 34.82 and sells ringgits at MYR 1 = Rs 28.58. Which route gives him more ringgits, and by how many?

## 7 Two ideas together [3]

Solve the following problem. Show your working.

A shop imports phones priced in dollars and sells them at 20% profit on its rupee cost. The rupee is then devalued by 5%, so its next lot costs 5% more in rupees, but the shop keeps the same selling price. What is its profit percent on the new lot?

**Answer:** _____

## 8 Make your own [2]

Answer the following question.

Make up a chain-rule question with three currencies (the rupee and two others) whose answer is a whole number, and solve it.