

Topic: Percentages of Amounts

Introduction:

Being able to calculate percentages of certain quantities have many applications, some of which are: calculating sale prices, interest amounts on credit cards and loans, salary deductions or increases in pensions and allowances, to name a few.

Refresher Video:

<https://youtu.be/ty12FGhxQEw>

Summary:

$$a\% \text{ of } b = (a/100) \times b$$

Example a:

Q: Calculate 35% of 112.

A: Replace the 'of' in the question with a multiplication sign 'x'. In the calculator, this translates to: '35÷100 x 112 =', which gives an answer of **39.2**

$$a\% \text{ sale on } b \Leftrightarrow \text{you pay: } b - (a/100) \times b$$

Example b:

Q: In a video store, a DVD that sells for BD 15 is marked "10% off." What is the sale price of the DVD?

A: The sale price is found by : $15 - (10 \div 100 \times 15) = \text{BD } 13.5$

Questions:

- 1) Work out these percentages
 - (a) 50% of 280

- (b) 25% of 660
- (c) 30% of 245

- 2) Maryam gets 6.2 dinars pocket money a week. She spends 15% of her pocket money on sweets and 35% on magazines. She saves the rest.
- (a) Work out how much she spends on magazines.
 - (b) Work out how much she saves each week.
- 3) A CD player originally costs 35 dinars. If the CD player is on 10% discount. How much would you pay to buy it?
- 4) A used mobile phone costs 60 dinars. If the seller makes a 40% discount, how much would the new price be?

Answers:

- 1) (a) 140
(b) 165
(c) 73.5
- 2) (a) 2.17 dinars
(b) 3.1 dinars
- 3) 31.5 dinars
4) 36 dinars