PROFIT AND LOSS

Cost price: The price that one pays for;when buying an object .Profit: It is the extra money earned out of selling an object for more than its cost price.

Selling price: the price at which an object is sold.

PROFIT=SP-CP

LOSS=CP-SP

LOSS %= $\frac{LOSS}{COST\ PRICE} X\ 100$

PROFIT %= $\frac{PROFIT}{COST\ PRICE} X\ 100$

SELLING PRICE= $\frac{100+GAIN\%}{100} X\ COST\ PRICE$

SELLING PRICE= $\frac{100-LOSS\%}{100} X\ COST\ PRICE$

COST PRICE= $\frac{100\ X\ SELLING\ PRICE}{100-LOSS\%}$

COST PRICE= $\frac{100\ X\ SELLING\ PRICE}{100+PROFIT\%}$

DISCOUNT%= $\frac{DISCOUNT\ X\ 100}{MARKET\ PRICE}$

IGCSE PAST PAPER QUESTIONS:

1 A factory produces bird food made with sunflower seed, millet and maize.

(a) The amounts of sunflower seed, millet and maize are in the ratio

sunflower seed : millet : maize = 5 : 3 : 1 .

(i) How much millet is there in 15 kg of bird food?

Answer(a)(i) ..... kg [2]

(ii) In a small bag of bird food there is 60 g of sunflower seed.

What is the mass of bird food in a small bag?

Answer(a)(ii) ..... g [2]

(b) Sunflower seeds cost \$204.50 for 30 kg from Jon's farm or €96.40 for 20 kg from Ann's farm.
The exchange rate is \$1 = €0.718.

Which farm has the cheapest price per kilogram?
You must show clearly all your working.

Answer(b) ..... [4]

(c) Bags are filled with bird food at a rate of 420 grams per second.

How many 20 kg bags can be **completely** filled in 4 hours?

Answer(c) ..... [3]

(d) Brian buys bags of bird food from the factory and sells them in his shop for $15.30 each. He makes 12.5% profit on each bag.

How much does Brian pay for each bag of bird food?

Answer(d) $ ..... [3]

(e) Brian orders 600 bags of bird food.

The probability that a bag is damaged is $\frac{1}{50}$.

How many bags would Brian expect to be damaged?

Answer(e) ..... [1]

MARKING SCHEME:

	(a) (i) 5	**2**	**M1** for $\frac{3\times15}{(5+3+1)}$
	(ii) 108	**2**	**M1** for $60 \times \frac{9}{5}$ oe
	(b) Correct conversion of money J × 0.718 or A ÷ 0.718	**M1**	Correct conversion of money soi by 146.83[1] rounded or truncated to 3sf or 134.26[1…] rounded or truncated to 3 sf if done 1st
	Correct equalising of weights e.g. $J \times \frac{2[0]}{3[0]}$ or $A \times \frac{3[0]}{2[0]}$ or J ÷ 3 and A ÷ 2 or J ÷ 30 and A ÷ 20	**M1**	Correct equalising of weights or money Accept other methods that give a pair of comparable values for method and accuracy marks This mark can be implied by values seen correct to 3 sf or better
	97 to 98 or 201[.39…] **and** Ann 48.9[4..] **and** 48.2[0] **and** Ann or 68[.16] to 68.[2] **and** 67[.13] **and** Ann 4.88… to 4.9 **and** 4.82 **and** Ann or 6.8[1..] to 6.82 **and** 6.7[1…] **and** Ann www	**A2**	The underlined values imply **M1** for the money conversion Or **A1** for 97 to 98 or 201[.39…] or a correct pair of values with wrong/no conclusion
	(c) 302 Final answer	**3**	**M1** for 60 × 60 × 4 soi by 14400 or figs 6048 or figs 3024 and **M1** for ÷ (1000 × 20) soi Answer 302.4 implies **M2**
	(d) 13.6[0]	**3**	**M2** for $\frac{15.3[0]}{1.125}$ oe or **M1** for 15.3[0] associated with 112.5%
	(e) 12	**1**	

MORE PRACTICE QUESTIONS AVAILABLE IN THE TOPIC WISE PAST PAPER QUESTIONS .