3.8 Percentage Change: 1-hour Pack

EDEXCEL 1MA1 · Calculator allowed · about 60 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Last year an annual rail season ticket cost £3120. This year it costs £3245. Work out the percentage increase in the cost of the ticket. Give your answer correct to 1 decimal place.

(Total for Question 1 is 3 marks)

---

2 A tenant's monthly rent increases from £850 to £918. Work out the percentage increase in the rent.

(Total for Question 2 is 3 marks)

---

3 A phone was valued at £600. One year later it was valued at £480. Work out the percentage decrease in its value.

(Total for Question 3 is 3 marks)

© Revision Library | revisionlibrary.co.uk

4 A trader buys a table for £80 and sells it for £52.00.
Work out the percentage loss.

(Total for Question 4 is 3 marks)

---

5 Last month a magazine cost £2. This month it costs £2.50. Work out the percentage increase in the price of the magazine.

(Total for Question 5 is 3 marks)

---

6 A shop's weekly sales fall from 400 units to 340 units. Work out the percentage decrease in weekly sales.

(Total for Question 6 is 3 marks)

---

7 Deepak buys a guitar for £80. He sells it for £92. Work out Deepak's percentage profit.

(Total for Question 7 is 3 marks)

---

8 Farah buys a painting for £250. She later sells it for £210. Work out Farah's percentage loss.

(Total for Question 8 is 3 marks)

© Revision Library | revisionlibrary.co.uk

9 Last year a gym membership cost £420. This year it costs £462. Work out the percentage increase in the cost of the membership.

(Total for Question 9 is 3 marks)

---

10 Last year Chidi paid £1380 for his car insurance. This year he pays £1195. Work out the percentage decrease in his car insurance. Give your answer correct to 1 decimal place.

(Total for Question 10 is 3 marks)

---

11 A train ticket cost £45 last year. This year it costs £51.75. Work out the percentage increase in the price of the ticket.

(Total for Question 11 is 3 marks)

---

12 A blender was priced at £68. In a sale it is now priced at £57.80. Work out the percentage decrease in the price of the blender.

(Total for Question 12 is 3 marks)

---

13 Marcus buys a bicycle for £140 and sells it for £168. Work out Marcus's percentage profit.

(Total for Question 13 is 3 marks)

© Revision Library | revisionlibrary.co.uk

14 Priya buys 12 kg of coffee beans for £96. She packages it into 200 g bags and sells each bag for £1.20. Work out whether Priya makes a percentage profit or a percentage loss, and calculate it.

(Total for Question 14 is 4 marks)

---

15 Increase £250 by 18%.

(Total for Question 15 is 3 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 3.8 Percentage Change: 1-hour Pack

A correct answer earns full marks unless the question asks for working, a method, proof or explanation.

Question 1

125 seen (3245 - 3120)	**M1**
125/3120 x 100 (oe)	**M1**
awrt 4.0%	**A1**

Answer: 4.0%

Question 2

68 seen (918 - 850)	**M1**
68/850 x 100 (oe)	**M1**
8% cao	**A1**

Answer: 8%

Question 3

120 seen (600 - 480)	**M1**
120/600 x 100 (oe)	**M1**
20% cao	**A1**

Answer: 20%

Question 4

28 loss found	**M1**
28 / 80 x 100	**M1**
35%	**A1**

Answer: 35%

Question 5

0.50 seen (2.50 - 2)	**M1**
0.50/2 x 100 (oe)	**M1**
25% cao	**A1**

Answer: 25%

Question 6

60 seen (400 - 340)	**M1**
60/400 x 100 (oe)	**M1**
15% cao	**A1**

Answer: 15%

Question 7

12 seen (92 - 80)	**M1**
12/80 x 100 (oe)	**M1**
15% cao	**A1**

Answer: 15%

Question 8

40 seen (250 - 210)	**M1**
40/250 x 100 (oe)	**M1**
16% cao	**A1**

Answer: 16%

Question 9

42 seen (462 - 420)	**M1**
42/420 x 100 (oe)	**M1**
10% cao	**A1**

Answer: 10%

Question 10

185 seen (1380 - 1195)	**M1**
185/1380 x 100 (oe)	**M1**
awrt 13.4%	**A1**

Answer: 13.4%

Question 11

6.75 seen (51.75 - 45)	**M1**
6.75/45 x 100 (oe)	**M1**
15% cao	**A1**

Answer: 15%

Question 12

10.20 seen (68 - 57.80)	**M1**
10.20/68 x 100 (oe)	**M1**
15% cao	**A1**

Answer: 15%

Question 13

28 seen (168 - 140)	**M1**
28/140 x 100 (oe)	**M1**
20% cao	**A1**

Answer: 20%

Question 14

12000/200 = 60 bags	**M1**
60 x 1.20 = 72 (total revenue)	**M1**
96 - 72 = 24 (loss), dependent on both M1s	**dM1**
25% loss, cao (must state loss)	**A1**

Answer: 25% loss

Question 15

finds 18% of 250 (= 45), or uses multiplier 1.18	**M1**
adds their 18% to 250 (oe)	**M1**
295 (pounds) cao	**A1**

Answer: £295

© Revision Library | revisionlibrary.co.uk