2.8 Percentages, Money and Financial Problems: 2-hour Pack

Total Marks

ISEB CE.M8 · Calculator allowed · about 120 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 At a music shop in Brighton, a bicycle costs £165. In a sale the price is reduced by 45%. What is the sale price?

- ☐ A) £90.75
- ☐ B) £74.25
- ☐ C) £7.43
- ☐ D) £239.25
- ☐ E) £742.50

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2 The price of a school trip rose from £120 to £144. What is the percentage increase?

- ☐ A) 10%
- ☐ B) 120%
- ☐ C) 16.7%
- ☐ D) 20%
- ☐ E) £24

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3 Mei buys a tablet in a sale. The price has been reduced by 60%, and Mei pays £86. What was the original price of the tablet?

- ☐ A) £215
- ☐ B) £76
- ☐ C) £146
- ☐ D) £34.40
- ☐ E) £189.20

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4 A new coat is worth £5000. Its value falls by 3% each year. What is it worth after 2 years?

- [ ] A) £4700
- [ ] B) £9700
- [ ] C) £4704.50
- [ ] D) £4850
- [ ] E) £300

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5 Work out 25% of £100.

- [ ] A) £75
- [ ] B) £25
- [ ] C) £2.50
- [ ] D) £4
- [ ] E) £125

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6 The price of a microscope has gone up by 30% and is now £227.50. What was the price before the rise?

- [ ] A) £325
- [ ] B) £175
- [ ] C) £217.50
- [ ] D) £197.50
- [ ] E) £159.25

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7 A new camera is worth £5000. Its value falls by 6% each year. What is it worth after 2 years?

- [ ] A) £4418
- [ ] B) £600
- [ ] C) £4700
- [ ] D) £5618
- [ ] E) £9400

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8 At a bookshop in Leeds, a coat costs £85. In a sale the price is reduced by 15%. What is the sale price?

- [ ] A) £5.67
- [ ] B) £97.75
- [ ] C) £72.25
- [ ] D) £1.28
- [ ] E) £12.75

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9 The price of a monthly bus pass fell from £205 to £188.60. What is the percentage decrease?

- [ ] A) 4%
- [ ] B) £16.40
- [ ] C) 108.7%
- [ ] D) 92%
- [ ] E) 8%

---

10 At a school tuck shop, a rucksack costs £40. In a sale the price is reduced by 5%. What is the sale price?

- [ ] A) £20
- [ ] B) £42
- [ ] C) £0.20
- [ ] D) £8
- [ ] E) £38

---

11 A microscope costs £187 including VAT at 10%. What is the price before VAT is added?

- [ ] A) £149.60
- [ ] B) £205.70
- [ ] C) £168.30
- [ ] D) £170
- [ ] E) £177

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12 A new pair of trainers is worth £500. Its value falls by 25% each year. What is it worth after 2 years?

- [ ] A) £281.25
- [ ] B) £750
- [ ] C) £250
- [ ] D) £375
- [ ] E) £781.25

---

13 The price of a ticket fell from £510 to £280.50. What is the percentage decrease?

- [ ] A) 22.5%
- [ ] B) 181.8%
- [ ] C) 81.8%
- [ ] D) £229.50
- [ ] E) 45%

---

14 A rucksack costs £306 including VAT at 20%. What is the price before VAT is added?

- [ ] A) £183.60
- [ ] B) £255
- [ ] C) £244.80
- [ ] D) £286
- [ ] E) £296

---

15 A shop's takings were £2000 in January. They rose by 2% in February, then fell by 5% in March. What were the takings in March?

- [ ] A) £1940
- [ ] B) £2040
- [ ] C) £2060
- [ ] D) £1938
- [ ] E) £2142

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16 The price of a monthly bus pass rose from £80 to £84. What is the percentage increase?

- [ ] A) 5%
- [ ] B) 4.8%
- [ ] C) £4
- [ ] D) 105%
- [ ] E) 95.2%

---

17 Siobhan buys a coat in a sale. The price has been reduced by 12%, and Siobhan pays £206.80. What was the original price of the coat?

- [ ] A) £218.80
- [ ] B) £196.80
- [ ] C) £181.98
- [ ] D) £235
- [ ] E) £184.64

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18 A new tablet is worth £2500. Its value falls by 2% each year. What is it worth after 3 years?

- [ ] A) £2350
- [ ] B) £2401
- [ ] C) £2352.98
- [ ] D) £150
- [ ] E) £2653.02

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19 At a bike shop in Norwich, a desk costs £300 before VAT of 12% is added. What is the price including VAT?

- [ ] A) £360
- [ ] B) £336
- [ ] C) £264
- [ ] D) £36
- [ ] E) £25

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20 The price of a monthly bus pass fell from £40 to £32. What is the percentage decrease?

- [ ] A) 25%
- [ ] B) 20%
- [ ] C) 10%
- [ ] D) £8
- [ ] E) 80%

---

21 The price of a bicycle has gone up by 5% and is now £152.25. What was the price before the rise?

- [ ] A) £159.86
- [ ] B) £142.25
- [ ] C) £137.03
- [ ] D) £145
- [ ] E) £144.64

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22 A new rucksack is worth £4000. Its value falls by 6% each year. What is it worth after 2 years?

- [ ] A) £3534.40
- [ ] B) £3520
- [ ] C) £3760
- [ ] D) £7520
- [ ] E) £4494.40

---

23 At an online shop, a camera costs £120. In a sale the price is reduced by 25%. What is the sale price?

- [ ] A) £4.80
- [ ] B) £150
- [ ] C) £300
- [ ] D) £30
- [ ] E) £90

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24 The price of a ticket rose from £220 to £352. What is the percentage increase?

- [ ] A) 37.5%
- [ ] B) 160%
- [ ] C) 60%
- [ ] D) 30%
- [ ] E) 62.5%

---

25 The price of a desk has gone up by 15% and is now £143.75. What was the price before the rise?

- [ ] A) £133.75
- [ ] B) £169.12
- [ ] C) £128.75
- [ ] D) £125
- [ ] E) £165.31

---

26 At a bike shop in Norwich, a football kit costs £65. In a sale the price is reduced by 20%. What is the sale price?

- [ ] A) £78
- [ ] B) £3.25
- [ ] C) £13
- [ ] D) £1.30
- [ ] E) £52

---

27 The price of a pair of boots rose from £30 to £33.60. What is the percentage increase?

- [ ] A) 12%
- [ ] B) 10.7%
- [ ] C) 89.3%
- [ ] D) 112%
- [ ] E) 6%

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28 Mei buys a football kit in a sale. The price has been reduced by 5%, and Mei pays £223.25. What was the original price of the football kit?

- [ ] A) £212.62
- [ ] B) £235
- [ ] C) £213.25
- [ ] D) £245.58
- [ ] E) £228.25

---

29 A new coat is worth £800. Its value falls by 5% each year. What is it worth after 3 years?

- [ ] A) £680
- [ ] B) £685.90
- [ ] C) £722
- [ ] D) £926.10
- [ ] E) £120

---

30 At a garden centre near Bath, a tablet costs £330 before VAT of 8% is added. What is the price including VAT?

- [ ] A) £356.40
- [ ] B) £26.40
- [ ] C) £264
- [ ] D) £2.64
- [ ] E) £303.60

---

31 The price of a school trip fell from £140 to £128.80. What is the percentage decrease?

- [ ] A) 4%
- [ ] B) 92%
- [ ] C) £11.20
- [ ] D) 8.7%
- [ ] E) 8%

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32 At a market stall in Glasgow, a desk costs £95. In a sale the price is reduced by 18%. What is the sale price?

- [ ] A) £1.71
- [ ] B) £171
- [ ] C) £5.28
- [ ] D) £112.10
- [ ] E) £77.90

---

33 The price of a ticket fell from £240 to £186. What is the percentage decrease?

- [ ] A) 11.25%
- [ ] B) 129.0%
- [ ] C) 77.5%
- [ ] D) 22.5%
- [ ] E) 29.0%

---

34 The price of a bicycle has gone up by 60% and is now £184. What was the price before the rise?

- [ ] A) £115
- [ ] B) £460
- [ ] C) £174
- [ ] D) £124
- [ ] E) £73.60

---

35 A new bicycle is worth £500. Its value falls by 25% each year. What is it worth after 2 years?

- [ ] A) £375
- [ ] B) £250
- [ ] C) £281.25
- [ ] D) £781.25
- [ ] E) £750

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36 At a garden centre near Bath, a rucksack costs £80. In a sale the price is reduced by 17.5%. What is the sale price?

- [ ] A) £140
- [ ] B) £4.57
- [ ] C) £66
- [ ] D) £1.40
- [ ] E) £14

---

37 The price of a pair of boots fell from £495 to £346.50. What is the percentage decrease?

- [ ] A) 70%
- [ ] B) 30%
- [ ] C) 15%
- [ ] D) 42.9%
- [ ] E) 142.9%

---

38 The price of a jacket has gone up by 20% and is now £144. What was the price before the rise?

- [ ] A) £115.20
- [ ] B) £124
- [ ] C) £86.40
- [ ] D) £134
- [ ] E) £120

---

39 At a school tuck shop, a camera costs £200. In a sale the price is reduced by 17.5%. What is the sale price?

- [ ] A) £165
- [ ] B) £3.50
- [ ] C) £235
- [ ] D) £11.43
- [ ] E) £350

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40 The price of a pair of boots fell from £195 to £117. What is the percentage decrease?

- [ ] A) £78
- [ ] B) 20%
- [ ] C) 166.7%
- [ ] D) 60%
- [ ] E) 40%

---

41 Archie buys a desk in a sale. The price has been reduced by 25%, and Archie pays £33.75. What was the original price of the desk?

- [ ] A) £25.31
- [ ] B) £45
- [ ] C) £23.75
- [ ] D) £58.75
- [ ] E) £27

---

42 At a garden centre near Bath, a desk costs £60. The price goes up by 22.5%. What is the new price?

- [ ] A) £46.50
- [ ] B) £2.67
- [ ] C) £13.50
- [ ] D) £73.50
- [ ] E) £1.35

---

43 The price of a subscription fell from £90 to £85.50. What is the percentage decrease?

- [ ] A) 5%
- [ ] B) £4.50
- [ ] C) 95%
- [ ] D) 2.5%
- [ ] E) 105.3%

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44 The price of a football kit has gone up by 12% and is now £425.60. What was the price before the rise?

- [ ] A) £323.46
- [ ] B) £380
- [ ] C) £476.67
- [ ] D) £413.60
- [ ] E) £374.53

---

45 At a bookshop in Leeds, a football kit costs £110. In a sale the price is reduced by 35%. What is the sale price?

- [ ] A) £385
- [ ] B) £3.14
- [ ] C) £71.50
- [ ] D) £3.85
- [ ] E) £148.50

---

46 The price of a monthly bus pass fell from £550 to £481.25. What is the percentage decrease?

- [ ] A) 6.25%
- [ ] B) 87.5%
- [ ] C) £68.75
- [ ] D) 14.3%
- [ ] E) 12.5%

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47 Harriet buys a microscope in a sale. The price has been reduced by 35%, and Harriet pays £48.75. What was the original price of the microscope?

- [ ] A) £83.75
- [ ] B) £82.88
- [ ] C) £31.69
- [ ] D) £75
- [ ] E) £36.11

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48 Dev invests £1200 in an account paying 4% compound interest per year. How much is in the account after 2 years? Assume no money is taken out.

- [ ] A) £1297.92
- [ ] B) £2496
- [ ] C) £1248
- [ ] D) £1296
- [ ] E) £1349.84

---

49 At a school tuck shop, a tennis racket costs £80. In a sale the price is reduced by 45%. What is the sale price?

- [ ] A) £3.60
- [ ] B) £44
- [ ] C) £36
- [ ] D) £360
- [ ] E) £116

---

50 The price of a subscription fell from £580 to £478.50. What is the percentage decrease?

- [ ] A) 121.2%
- [ ] B) 82.5%
- [ ] C) £101.50
- [ ] D) 21.2%
- [ ] E) 17.5%

---

51 The price of a bicycle has gone up by 15% and is now £396.75. What was the price before the rise?

- [ ] A) £337.24
- [ ] B) £386.75
- [ ] C) £345
- [ ] D) £277.73
- [ ] E) £466.76

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52 A school raised £120 for a local food bank last year. This year the amount raised increased by 30%.

(a) Calculate the amount raised this year. **(2)**

.....

(b) Express the increase in the amount raised as a fraction of last year's amount. Give your answer in its simplest form. **(2)**

---

53 At a bike shop in Norwich, a bicycle costs £200. The price goes up by 17.5%. What is the new price?

- ☐ A) £165
- ☐ B) £235
- ☐ C) £35
- ☐ D) £350
- ☐ E) £11.43

---

54 The price of a school trip fell from £555 to £471.75. What is the percentage decrease?

- ☐ A) £83.25
- ☐ B) 117.6%
- ☐ C) 15%
- ☐ D) 17.6%
- ☐ E) 85%

---

55 Tom buys a tablet in a sale. The price has been reduced by 10%, and Tom pays £112.50. What was the original price of the tablet?

- ☐ A) £123.75
- ☐ B) £122.50
- ☐ C) £135
- ☐ D) £101.25
- ☐ E) £125

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56 A new desk is worth £800. Its value falls by 4% each year. What is it worth after 2 years?

- [ ] A) £736
- [ ] B) £1536
- [ ] C) £865.28
- [ ] D) £737.28
- [ ] E) £64

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57 At a bike shop in Norwich, a camera costs £310 before VAT of 7.5% is added. What is the price including VAT?

- [ ] A) £333.25
- [ ] B) £41.33
- [ ] C) £232.50
- [ ] D) £286.75
- [ ] E) £23.25

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58 The price of a ticket rose from £80 to £89.60. What is the percentage increase?

- [ ] A) 12%
- [ ] B) £9.60
- [ ] C) 112%
- [ ] D) 89.3%
- [ ] E) 10.7%

---

59 A new rucksack is worth £400. Its value falls by 2% each year. What is it worth after 2 years?

- [ ] A) £416.16
- [ ] B) £384.16
- [ ] C) £784
- [ ] D) £384
- [ ] E) £16

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60 At a school tuck shop, a guitar costs £260. The price goes up by 12.5%. What is the new price?

- ☐ A) £32.50
- ☐ B) £227.50
- ☐ C) £20.80
- ☐ D) £292.50
- ☐ E) £3.25

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61 The price of a school trip fell from £30 to £22.50. What is the percentage decrease?

- ☐ A) 33.3%
- ☐ B) 133.3%
- ☐ C) 25%
- ☐ D) 75%
- ☐ E) £7.50

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62 A games console costs £460 before VAT is added. VAT is charged at 20%. Calculate the total price of the console, including VAT.

(3)

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63 Callum buys a bicycle in a sale. The price has been reduced by 12%, and Callum pays £176. What was the original price of the bicycle?

- ☐ A) £218.24
- ☐ B) £200
- ☐ C) £154.88
- ☐ D) £157.14
- ☐ E) £166

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64 Ben invests £4000 in an account paying 8% compound interest per year. How much is in the account after 2 years? Assume no money is taken out.

- [ ] A) £4665.60
- [ ] B) £5038.85
- [ ] C) £640
- [ ] D) £4640
- [ ] E) £4320

---

65 At a school tuck shop, a rucksack costs £75. In a sale the price is reduced by 18%. What is the sale price?

- [ ] A) £88.50
- [ ] B) £1.35
- [ ] C) £13.50
- [ ] D) £135
- [ ] E) £61.50

---

66 The price of a tablet has gone up by 40% and is now £280. What was the price before the rise?

- [ ] A) £240
- [ ] B) £168
- [ ] C) £200
- [ ] D) £56
- [ ] E) £392

---

67 A new rucksack is worth £400. Its value falls by 4% each year. What is it worth after 2 years?

- [ ] A) £368.64
- [ ] B) £768
- [ ] C) £384
- [ ] D) £32
- [ ] E) £368

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68 At a bike shop in Norwich, a rucksack costs £80. In a sale the price is reduced by 12%. What is the sale price?

- [ ] A) £6.67
- [ ] B) £89.60
- [ ] C) £70.40
- [ ] D) £9.60
- [ ] E) £96

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69 Eleni buys a pair of trainers in a sale. The price has been reduced by 12%, and Eleni pays £70.40. What was the original price of the pair of trainers?

- [ ] A) £78.85
- [ ] B) £60.40
- [ ] C) £87.30
- [ ] D) £80
- [ ] E) £82.40

---

70 A new rucksack is worth £2000. Its value falls by 5% each year. What is it worth after 2 years?

- [ ] A) £2205
- [ ] B) £1805
- [ ] C) £1900
- [ ] D) £1800
- [ ] E) £200

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71 Aiden invests £500 in a savings account paying simple interest at 3% per year. Calculate the total amount in the account after 4 years.

(3)

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72 The price of a subscription fell from £495 to £420.75. What is the percentage decrease?

- [ ] A) £74.25
- [ ] B) 15%
- [ ] C) 7.5%
- [ ] D) 117.6%
- [ ] E) 85%

---

73 A desk costs £225 including VAT at 25%. What is the price before VAT is added?

- [ ] A) £215
- [ ] B) £200
- [ ] C) £180
- [ ] D) £112.50
- [ ] E) £281.25

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74 A new tablet is worth £1500. Its value falls by 6% each year. What is it worth after 2 years?

- [ ] A) £180
- [ ] B) £1685.40
- [ ] C) £2820
- [ ] D) £1325.40
- [ ] E) £1320

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75 At a music shop in Brighton, a football kit costs £50 before VAT of 37.5% is added. What is the price including VAT?

- [ ] A) £68.75
- [ ] B) £1.33
- [ ] C) £1.88
- [ ] D) £18.75
- [ ] E) £31.25

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76 The price of a school trip rose from £165 to £239.25. What is the percentage increase?

- [ ] A) 45%
- [ ] B) 31.0%
- [ ] C) 145%
- [ ] D) 22.5%
- [ ] E) £74.25

---

77 Grace buys a guitar in a sale. The price has been reduced by 50%, and Grace pays £17.50. What was the original price of the guitar?

- [ ] A) £8.75
- [ ] B) £11.67
- [ ] C) £35
- [ ] D) £26.25
- [ ] E) £67.50

---

78 Priya invests £200 in an account paying 10% compound interest per year. How much is in the account after 2 years? Assume no money is taken out.

- [ ] A) £266.20
- [ ] B) £40
- [ ] C) £240
- [ ] D) £440
- [ ] E) £242

---

79 The price of a subscription fell from £40 to £32. What is the percentage decrease?

- [ ] A) 80%
- [ ] B) 125%
- [ ] C) 25%
- [ ] D) 20%
- [ ] E) £8

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80 The price of a rucksack has gone up by 35% and is now £162. What was the price before the rise?

- [ ] A) £127
- [ ] B) £120
- [ ] C) £152
- [ ] D) £105.30
- [ ] E) £48.60

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81 At an online shop, a bicycle costs £385. The price goes up by 8%. What is the new price?

- [ ] A) £3.08
- [ ] B) £48.13
- [ ] C) £354.20
- [ ] D) £308
- [ ] E) £415.80

---

82 The price of a monthly bus pass rose from £270 to £438.75. What is the percentage increase?

- [ ] A) 62.5%
- [ ] B) 38.5%
- [ ] C) 162.5%
- [ ] D) £168.75
- [ ] E) 31.25%

---

83 A camera costs £396.75 including VAT at 15%. What is the price before VAT is added?

- [ ] A) £466.76
- [ ] B) £456.26
- [ ] C) £345
- [ ] D) £337.24
- [ ] E) £277.73

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84 At a bike shop in Norwich, a desk costs £160 before VAT of 8% is added. What is the price including VAT?

- [ ] A) £12.80
- [ ] B) £172.80
- [ ] C) £147.20
- [ ] D) £1.28
- [ ] E) £128

---

85 The price of a pair of boots fell from £320 to £264. What is the percentage decrease?

- [ ] A) 21.2%
- [ ] B) 82.5%
- [ ] C) 121.2%
- [ ] D) 17.5%
- [ ] E) 8.75%

---

86 Oliver buys a jacket in a sale. The price has been reduced by 5%, and Oliver pays £294.50. What was the original price of the jacket?

- [ ] A) £280.48
- [ ] B) £279.78
- [ ] C) £284.50
- [ ] D) £299.50
- [ ] E) £310

---

87 A new bicycle is worth £5000. Its value falls by 10% each year. What is it worth after 2 years?

- [ ] A) £9000
- [ ] B) £6050
- [ ] C) £4050
- [ ] D) £4500
- [ ] E) £4000

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88 Freya invests £800 in a savings account paying compound interest at 4% per year. Calculate the value of her investment after 3 years, giving your answer to the nearest penny.

(3)

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89 At an online shop, a rucksack costs £30. The price goes up by 2.5%. What is the new price?

- ☐ A) £0.08
- ☐ B) £7.50
- ☐ C) £30.75
- ☐ D) £0.75
- ☐ E) £29.25

---

90 The price of a school trip fell from £580 to £319. What is the percentage decrease?

- ☐ A) 81.8%
- ☐ B) 181.8%
- ☐ C) £261
- ☐ D) 45%
- ☐ E) 22.5%

---

91 A new pair of trainers is worth £500. Its value falls by 4% each year. What is it worth after 2 years?

- ☐ A) £40
- ☐ B) £540.80
- ☐ C) £960
- ☐ D) £480
- ☐ E) £460.80

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92 At an online shop, a jacket costs £60. In a sale the price is reduced by 22.5%. What is the sale price?

- [ ] A) £46.50
- [ ] B) £135
- [ ] C) £1.35
- [ ] D) £73.50
- [ ] E) £2.67

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93 The price of a ticket rose from £95 to £123.50. What is the percentage increase?

- [ ] A) 15%
- [ ] B) 130%
- [ ] C) 76.9%
- [ ] D) 30%
- [ ] E) 23.1%

---

94 Will invests £5000 in an account paying 6% compound interest per year. How much is in the account after 3 years? Assume no money is taken out.

- [ ] A) £5618
- [ ] B) £5955.08
- [ ] C) £15900
- [ ] D) £900
- [ ] E) £6312.38

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95 At a bike shop in Norwich, a tablet costs £390. In a sale the price is reduced by 7.5%. What is the sale price?

- [ ] A) £360.75
- [ ] B) £52
- [ ] C) £2.93
- [ ] D) £292.50
- [ ] E) £419.25

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96 The price of a ticket rose from £140 to £210. What is the percentage increase?

- ☐ A) £70
- ☐ B) 66.7%
- ☐ C) 150%
- ☐ D) 33.3%
- ☐ E) 50%

---

97 Nadia earns £11.50 per hour for a standard working week. Any overtime is paid at 1.5 times her normal hourly rate.

(a) Nadia works a standard 35-hour week. Calculate her pay for this week. **(2)**

.....

(b) In one week, Nadia works her standard 35 hours plus 6 hours of overtime. Calculate her total pay for that week. **(3)**

.....

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98 The price of a washing machine, including 20% VAT, is £474. Calculate the price of the washing machine before VAT was added.

(3)

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99 Kwame opens a savings account with £2000. The account pays compound interest at 2.5% per year.

(a) Calculate the value of his savings after 2 years, to the nearest penny. **(3)**

.....

(b) At the start of year 3, Kwame withdraws £500 from the account. Interest at 2.5% per year continues to be paid on the remaining balance. Calculate the value of his savings at the end of year 3, to the nearest penny. **(3)**

.....

---

100 A student council is organising a school talent show. The organisers must pay a venue hire fee of £150, plus 20% VAT on the venue hire fee. They also spend £45 on decorations (this amount already includes VAT). Tickets are sold at £8 each.

(a) Calculate the total cost of the venue hire, including VAT. **(2)**

.....

(b) 96 tickets are sold. Calculate the total income from ticket sales. **(2)**

.....

(c) Calculate the percentage of the ticket income that is spent on the venue hire (including VAT) and decorations combined. Give your answer correct to 1 decimal place. **(3)**

.....

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101 Mrs Bennett is organising a Year 8 ski trip. The full price per student is £680.

(a) The school negotiates a 12% discount on the full price for group bookings of 20 or more students. Calculate the discounted price per student, to the nearest penny. **(2)**

.....

(b) Students who pay by 31 January receive an additional 5% off the discounted price. The two discounts are applied one after the other, not added together. Calculate the final price per student for a student who pays by 31 January. **(2)**

.....

(c) 24 students go on the trip, and all of them pay by 31 January. Calculate the total amount paid by the students. **(2)**

.....

(d) Mrs Bennett had instead invested the total amount from part c in a savings account paying 2% compound interest per year for 2 years, before eventually paying the ski company. Calculate how much interest this investment would have earned, giving your answer to the nearest penny. **(4)**

.....

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Mark scheme · 2.8 Percentages, Money and Financial Problems: 2-hour Pack

Question 1

A cao (£90.75); 45% of £165 = £74.25 **B1**

Answer: A) £90.75

Question 2

D cao (20%); change £24; 24 ÷ 120 x 100 **B1**

Answer: D) 20%

Question 3

A cao (£215); price = 86 ÷ 0.4 **B1**

Answer: A) £215

Question 4

C cao (£4704.50); multiply by the yearly multiplier each time **B1**

Answer: C) £4704.50

Question 5

B cao (£25); 25% of £100 = £25 **B1**

Answer: B) £25

Question 6

B cao (£175); price = 227.5 ÷ 1.3 **B1**

Answer: B) £175

Question 7

A cao (£4418); multiply by the yearly multiplier each time **B1**

Answer: A) £4418

Question 8

C cao (£72.25); 15% of £85 = £12.75 **B1**

Answer: C) £72.25

Question 9

E cao (8%); change £16.40; 16.4 ÷ 205 x 100 **B1**

Answer: E) 8%

Question 10

E cao (£38); 5% of £40 = £2 **B1**

Answer: E) £38

Question 11

D cao (£170); price = 187 ÷ 1.1 **B1**

Answer: D) £170

Question 12

A cao (£281.25); multiply by the yearly multiplier each time **B1**

Answer: A) £281.25

Question 13

E cao (45%); change £229.50; 229.5 ÷ 510 x 100 **B1**

Answer: E) 45%

Question 14

B cao (£255); price = 306 ÷ 1.2 **B1**

Answer: B) £255

Question 15

D cao (£1938); multiply by the yearly multiplier each time **B1**

Answer: D) £1938

Question 16

A cao (5%); change £4; 4 ÷ 80 x 100 **B1**

Answer: A) 5%

Question 17

D cao (£235); price = 206.8 ÷ 0.88 **B1**

Answer: D) £235

Question 18

C cao (£2352.98); multiply by the yearly multiplier each time **B1**

Answer: C) £2352.98

Question 19

B cao (£336); 12% of £300 = £36 **B1**

Answer: B) £336

Question 20

B cao (20%); change £8; 8 ÷ 40 x 100 **B1**

Answer: B) 20%

Question 21

D cao (£145); price = 152.25 ÷ 1.05 **B1**

Answer: D) £145

Question 22

A cao (£3534.40); multiply by the yearly multiplier each time **B1**

Answer: A) £3534.40

Question 23

E cao (£90); 25% of £120 = £30 **B1**

Answer: E) £90

Question 24

C cao (60%); change £132; 132 ÷ 220 x 100 **B1**

Answer: C) 60%

Question 25

D cao (£125); price = 143.75 ÷ 1.15 **B1**

Answer: D) £125

Question 26

E cao (£52); 20% of £65 = £13 **B1**

Answer: E) £52

Question 27

A cao (12%); change £3.60; 3.6 ÷ 30 x 100 **B1**

Answer: A) 12%

Question 28

B cao (£235); price = 223.25 ÷ 0.95 **B1**

Answer: B) £235

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Question 29

B cao (£685.90); multiply by the yearly multiplier each time **B1**

Answer: B) £685.90

Question 30

A cao (£356.40); 8% of £330 = £26.40 **B1**

Answer: A) £356.40

Question 31

E cao (8%); change £11.20; 11.2 ÷ 140 x 100 **B1**

Answer: E) 8%

Question 32

E cao (£77.90); 18% of £95 = £17.10 **B1**

Answer: E) £77.90

Question 33

D cao (22.5%); change £54; 54 ÷ 240 x 100 **B1**

Answer: D) 22.5%

Question 34

A cao (£115); price = 184 ÷ 1.6 **B1**

Answer: A) £115

Question 35

C cao (£281.25); multiply by the yearly multiplier each time **B1**

Answer: C) £281.25

Question 36

C cao (£66); 17.5% of £80 = £14 **B1**

Answer: C) £66

Question 37

B cao (30%); change £148.50; 148.5 ÷ 495 x 100 **B1**

Answer: B) 30%

Question 38

E cao (£120); price = 144 ÷ 1.2 **B1**

Answer: E) £120

Question 39

A cao (£165); 17.5% of £200 = £35 **B1**

Answer: A) £165

Question 40

E cao (40%); change £78; 78 ÷ 195 x 100 **B1**

Answer: E) 40%

Question 41

B cao (£45); price = 33.75 ÷ 0.75 **B1**

Answer: B) £45

Question 42

D cao (£73.50); 22.5% of £60 = £13.50 **B1**

Answer: D) £73.50

Question 43

A cao (5%); change £4.50; 4.5 ÷ 90 x 100 **B1**

Answer: A) 5%

Question 44

B cao (£380); price = 425.6 ÷ 1.12 **B1**

Answer: B) £380

Question 45

C cao (£71.50); 35% of £110 = £38.50 **B1**

Answer: C) £71.50

Question 46

E cao (12.5%); change £68.75; 68.75 ÷ 550 x 100 **B1**

Answer: E) 12.5%

Question 47

D cao (£75); price = 48.75 ÷ 0.65 **B1**

Answer: D) £75

Question 48

A cao (£1297.92); multiply by the yearly multiplier each time **B1**

Answer: A) £1297.92

Question 49

B cao (£44); 45% of £80 = £36 **B1**

Answer: B) £44

Question 50

E cao (17.5%); change £101.50; 101.5 ÷ 580 x 100 **B1**

Answer: E) 17.5%

Question 51

C cao (£345); price = 396.75 ÷ 1.15 **B1**

Answer: C) £345

Question 52

(a) finds 30% of 120 (36), or equivalent **M1**

(a) 156 cao **A1**

(a) Answer: £156

(b) 36/120 oe seen **M1**

(b) 3/10 cao, simplest form required **A1**

(b) Answer: 3/10

Question 53

B cao (£235); 17.5% of £200 = £35 **B1**

Answer: B) £235

Question 54

C cao (15%); change £83.25; 83.25 ÷ 555 x 100 **B1**

Answer: C) 15%

Question 55

E cao (£125); price = 112.5 ÷ 0.9 **B1**

Answer: E) £125

Question 56

D cao (£737.28); multiply by the yearly multiplier each time **B1**

Answer: D) £737.28

Question 57

A cao (£333.25); 7.5% of £310 = £23.25 **B1**

Answer: A) £333.25

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Question 58

A cao (12%); change £9.60; 9.6 ÷ 80 x 100 **B1**

Answer: A) 12%

Question 59

B cao (£384.16); multiply by the yearly multiplier each time **B1**

Answer: B) £384.16

Question 60

D cao (£292.50); 12.5% of £260 = £32.50 **B1**

Answer: D) £292.50

Question 61

C cao (25%); change £7.50; 7.5 ÷ 30 x 100 **B1**

Answer: C) 25%

Question 62

finds 10% of 460 (46), or equivalent **M1**

finds 20% of 460 (92), or uses the multiplier 1.2 **M1**

552 cao **A1**

Answer: £552

Question 63

B cao (£200); price = 176 ÷ 0.88 **B1**

Answer: B) £200

Question 64

A cao (£4665.60); multiply by the yearly multiplier each time **B1**

Answer: A) £4665.60

Question 65

E cao (£61.50); 18% of £75 = £13.50 **B1**

Answer: E) £61.50

Question 66

C cao (£200); price = 280 ÷ 1.4 **B1**

Answer: C) £200

Question 67

A cao (£368.64); multiply by the yearly multiplier each time **B1**

Answer: A) £368.64

Question 68

C cao (£70.40); 12% of £80 = £9.60 **B1**

Answer: C) £70.40

Question 69

D cao (£80); price = 70.4 ÷ 0.88 **B1**

Answer: D) £80

Question 70

B cao (£1805); multiply by the yearly multiplier each time **B1**

Answer: B) £1805

Question 71

3% of 500 = 15 (interest for one year) **M1**

15 x 4 = 60 oe (total interest over 4 years) **M1**

560 cao **A1**

Answer: £560

Question 72

B cao (15%); change £74.25; 74.25 ÷ 495 x 100 **B1**

Answer: B) 15%

Question 73

C cao (£180); price = 225 ÷ 1.25 **B1**

Answer: C) £180

Question 74

D cao (£1325.40); multiply by the yearly multiplier each time **B1**

Answer: D) £1325.40

Question 75

A cao (£68.75); 37.5% of £50 = £18.75 **B1**

Answer: A) £68.75

Question 76

A cao (45%); change £74.25; 74.25 ÷ 165 x 100 **B1**

Answer: A) 45%

Question 77

C cao (£35); price = 17.5 ÷ 0.5 **B1**

Answer: C) £35

Question 78

E cao (£242); multiply by the yearly multiplier each time **B1**

Answer: E) £242

Question 79

D cao (20%); change £8; 8 ÷ 40 x 100 **B1**

Answer: D) 20%

Question 80

B cao (£120); price = 162 ÷ 1.35 **B1**

Answer: B) £120

Question 81

E cao (£415.80); 8% of £385 = £30.80 **B1**

Answer: E) £415.80

Question 82

A cao (62.5%); change £168.75; 168.75 ÷ 270 x 100 **B1**

Answer: A) 62.5%

Question 83

C cao (£345); price = 396.75 ÷ 1.15 **B1**

Answer: C) £345

Question 84

B cao (£172.80); 8% of £160 = £12.80 **B1**

Answer: B) £172.80

Question 85

D cao (17.5%); change £56; 56 ÷ 320 x 100 **B1**

Answer: D) 17.5%

Question 86

E cao (£310); price = 294.5 ÷ 0.95 **B1**

Answer: E) £310

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Question 87

C cao (£4050); multiply by the yearly multiplier each time **B1**

Answer: C) £4050

Question 88

uses the multiplier 1.04, e.g. 800 x 1.04 x 1.04 x 1.04 oe **M1**

1.04^3 = 1.124864 oe, or a correct intermediate value such as 899.891... seen **M1**

899.89 cao, awrt to the nearest penny **A1**

Answer: £899.89

Question 89

C cao (£30.75); 2.5% of £30 = £0.75 **B1**

Answer: C) £30.75

Question 90

D cao (45%); change £261; 261 ÷ 580 x 100 **B1**

Answer: D) 45%

Question 91

E cao (£460.80); multiply by the yearly multiplier each time **B1**

Answer: E) £460.80

Question 92

A cao (£46.50); 22.5% of £60 = £13.50 **B1**

Answer: A) £46.50

Question 93

D cao (30%); change £28.50; 28.5 ÷ 95 x 100 **B1**

Answer: D) 30%

Question 94

B cao (£5955.08); multiply by the yearly multiplier each time **B1**

Answer: B) £5955.08

Question 95

A cao (£360.75); 7.5% of £390 = £29.25 **B1**

Answer: A) £360.75

Question 96

E cao (50%); change £70; 70 ÷ 140 x 100 **B1**

Answer: E) 50%

Question 97

(a) 11.50 x 35 oe **M1**

(a) 402.50 cao **A1**

(a) Answer: £402.50

(b) overtime rate = 11.50 x 1.5 = 17.25 oe **M1**

(b) overtime pay = 17.25 x 6 = 103.50 ft **M1**

(b) 506.00 cao **A1**

(b) Answer: £506.00

Question 98

recognises that 474 represents 120% of the pre-VAT price, e.g. 1.2 x original = 474 oe **M1**

474 / 1.2 oe **M1**

395 cao **A1**

Answer: £395

Question 99

(a) uses the multiplier 1.025, e.g. 2000 x 1.025 x 1.025 oe **M1**

(a) 1.025^2 = 1.050625 oe, or a correct intermediate value such as 2050 (value after year 1) seen **M1**

(a) 2101.25 cao **A1**

(a) Answer: £2101.25

(b) 2101.25 - 500 = 1601.25 ft, from part a **M1**

(b) 1601.25 x 1.025 oe ft **M1**

(b) 1641.28 cao, awrt to the nearest penny **A1**

(b) Answer: £1641.28

Question 100

(a) 20% of 150 = 30 oe **M1**

(a) 180 cao **A1**

(a) Answer: £180

(b) 96 x 8 oe **M1**

(b) 768 cao **A1**

(b) Answer: £768

(c) total spent = 180 + 45 = 225 ft, from parts a and given decorations cost **M1**

(c) 225 / 768 x 100 oe ft **M1**

(c) 29.3% cao, awrt 1 decimal place **A1**

(c) Answer: 29.3%

Question 101

(a) 12% of 680 = 81.60 oe, or uses the multiplier 0.88 **M1**

(a) 598.40 cao **A1**

(a) Answer: £598.40

(b) 598.40 x 0.95 oe ft, from part a **M1**

(b) 568.48 cao ft **A1**

(b) Answer: £568.48

(c) 568.48 x 24 oe ft, from part b **M1**

(c) 13643.52 cao ft **A1**

(c) Answer: £13643.52

(d) uses the multiplier 1.02, e.g. 1.02^2 oe **M1**

(d) 13643.52 x 1.0404 oe ft, or a correct value for the investment such as 14194.72 seen, ft from part c **M1**

(d) subtracts the original amount to find the interest, ft **M1**

(d) 551.20 cao, awrt to the nearest penny **A1**

(d) Answer: £551.20

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