



KS2.M-Y5N2 Addition and Subtraction: Multi-Step Problems

Calculators not allowed · about 60 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** A delivery van left the depot with 4,275 kg of parcels. At the first stop it delivered 1,480 kg. At the second stop it collected 365 kg. How many kilograms of parcels were in the van after the second stop?

(2)

- 2** Maya reads 128 pages of a book on Monday and 143 pages on Tuesday. She still has 297 pages left to read. How many pages does the book have in total?

(2)

- 3** A school bought 5 boxes of pencils. Each box has 48 pencils. They gave 62 pencils to Year 5 for an art lesson. How many pencils are left in total now?

(3)

- 4** A theatre has 1,250 seats. On Friday evening 872 seats were sold. On Saturday evening 993 seats were sold. How many more seats were sold on Saturday than on Friday?

(2)

- 5** A garden centre sold 1,430 saplings in March and 1,287 saplings in April. They received a delivery of 540 new saplings in May. After selling 398 saplings in May, how many saplings were there in total across the three months combined?

(3)

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- 6** At the start of term there were 632 pupils in Year 5. 47 pupils moved to another school and 29 new pupils joined. What is the Year 5 class size now?

(2)

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- 7** A baker made 2,180 buns. He packed them into boxes of 24. After filling as many full boxes as possible he gave away 15 of the leftover buns to staff. How many buns were left unpacked after giving them away?

(2)

-
- 8** A museum had 4,500 visitors in May. In June there were 3,872 visitors. In July there were 4,213 visitors. How many visitors did the museum have in June and July together, and how many more is that than in May?

(a) How many visitors in June and July together?

(1)

(b) How many more is that than in May?

(1)

- 9** A library had 2,950 books. They bought 1,475 new books and removed 628 old books. How many books are now in the library?

(3)

- 10** A group of pupils collected 2,430 cans for a food bank. They sorted them into piles of 50. After making full piles they donated 23 cans to a local cafe from the leftover, unsorted cans. How many cans remained unsorted after the donation?

(2)

- 11** A sports centre sold 1,275 tickets in the morning and 1,842 tickets in the afternoon. They then refunded 157 tickets because of a cancelled session. How many tickets were sold in total after the refunds?

(3)

- 12** A farmer harvested 3,420 kg of potatoes. He sold 1,285 kg at the market and stored the rest. Later he used 125 kg for seed. How many kilograms did he store after setting aside seed potatoes?

(2)

- 13** A charity had 5,000 stamps. They gave 1,245 stamps to a local school and later received another 730 stamps as a donation. How many stamps do they have now?

(2)

- 14** A shop had 2,880 pencils. Before packing, they found 18 pencils were damaged and removed them. They packed the remaining pencils into boxes of 60. How many pencils were packed into full boxes?

(3)

-
- 15** Sofia had 4,005 stickers. She gave 1,250 to friends and split the rest equally into 5 albums. How many stickers are in each album?

(2)

-
- 16** A charity raised 6,400 in a campaign. They split the money so that 2,175 went to Project A and the rest was shared equally between Project B and Project C. How much did each of Project B and Project C receive?

(2)

-
- 17** Explain your answer: Two routes to school are shown. Route A is 1,375 m and Route B is 1,489 m. If Rupert walks to school and back home each day, which route saves more distance in a week (5 school days) and by how many metres? Show your working to justify your answer.

(2)

- 18** Explain your answer: A shopkeeper has 9,640 g of flour. He uses 375 g for each batch of bread. After making full batches he gives 40 g to a neighbour. How many full batches can he make and how much flour is left after the gift? Show working to explain your answer.

(3)

Mark scheme • KS2.M-Y5N2 Addition and Subtraction: Multi-Step Problems

Question 1

- **M1** Correct method shown: $4,275 - 1,480$ then $+ 365$ OR $4,275 + 365 - 1,480$
- **B1** 3,160 kg cao
- Answer: **3,160**

Question 2

- **M1** Correct method: $128 + 143 + 297$
- **B1** 568 cao
- Answer: **568**

Question 3

- **M1** Correct multiplication to find total pencils: 5×48
- **M1** Correct subtraction of 62 from the total
- **B1** 178 cao
- Answer: **178**

Question 4

- **M1** Correct subtraction $993 - 872$ shown
- **B1** 121 cao
- Answer: **121**

Question 5

- **M1** Correct addition/subtraction: $1,430 + 1,287 + 540 - 398$
- **M1** Intermediate total computed correctly
- **B1** 2,859 cao
- Answer: **2,859**

Question 6

- **M1** Shows $632 - 47 + 29$ or equivalent
- **B1** 614 cao
- Answer: **614**

Question 7

- **M1** Shows $2,180 \div 24 = 90 \text{ r}20$ or equivalent, then subtracts the 15 given away
- **B1** 5 cao
- Answer: **5**

Question 8

- (a) **B1** 8,085 cao
- (a) Answer: **8,085**
- (b) **B1** 3,585 more cao
- (b) Answer: **3,585**

Question 9

- **M1** Shows $2,950 + 1,475 - 628$
- **M1** Intermediate addition/subtraction correct
- **B1** 3,797 cao
- Answer: **3,797**

Question 10

- **M1** Shows $2,430 \div 50 = 48 \text{ r}30$ or equivalent and subtracts the 23 donated ($30 - 23$)
- **B1** 7 cao
- **Answer: 7**

Question 11

- **M1** Shows $1,275 + 1,842 - 157$
- **M1** Intermediate addition/subtraction correct
- **B1** 2,960 cao
- **Answer: 2,960**

Question 12

- **M1** Shows $3,420 - 1,285 - 125$ or equivalent
- **B1** 2,010 kg cao
- **Answer: 2,010**

Question 13

- **M1** Shows $5,000 - 1,245 + 730$
- **B1** 4,485 cao
- **Answer: 4,485**

Question 14

- **M1** Shows $2,880 - 18 = 2,862$ or equivalent
- **M1** Shows division $2,862 \div 60$ to find number of full boxes and total packed
- **B1** 2,820 cao
- **Answer: 2,820**

Question 15

- **M1** Shows $(4,005 - 1,250) \div 5$ or equivalent
- **B1** 551 cao
- **Answer: 551**

Question 16

- **M1** Shows $6,400 - 2,175$ then $\div 2$ or equivalent
- **B1** 2,112.5 cao
- **Answer: 2,112.5**

Question 17

- **M1** Working shows round trip distances compared correctly, e.g. $2 \times 1,375 = 2,750$ and $2 \times 1,489 = 2,978$
- **B1** Answer: Route A saves 1,140 metres in a week cao
- **Answer: Route A saves 1,140**

Question 18

- **M1** Correct division to find number of full batches: $9,640 \div 375 = 25 \text{ r} 265$ or equivalent
- **M1** Shows removing 40 g from remainder: $265 - 40 = 225$
- **B1** 25 batches and 225 g left cao
- **Answer: 25 and 225 g**