The Four Operations Word Problems: Bronze

1. Eleanor has 18 marbles. Benji has 35 marbles. Work out the total number of marbles that Eleanor and Benji have between them.

2. Sajid receives £136 for his birthday. He spends £41 and saves the rest. Work out how much money Sajid saves.

3. Ethan has 9 bags. Each bag contains 8 beads. Work out the total number of beads that Ethan has.

4. Mai has a bag containing 42 sweets. She wants to share these sweets equally between 7 friends. How many sweets will each friend receive?

5. A car park has 135 spaces on the ground floor, 109 spaces on the first floor and 72 on the second floor. Work out the total number of spaces in the car park.

6. There are six rulers in a pack. Mr Jones needs to buy enough rulers for 30 students. How many packs should he buy?

7. In 2016, Alexia used 1402 units of electricity. In 2017, Alexia used 173 more units of electricity than in 2016. Calculate how many units of electricity Alexia used in 2017.

8. Lewis has 14 075 photos stored in the cloud. His brother has 19 881 photos. How many more photos does Lewis' brother have?

9. Paulo walks 3 miles per day. Work out the total number of miles that Paulo will walk in 4 weeks.

10. On a school trip, there are 18 teachers and 175 students. There are enough spaces for 210 people in total. How many extra spaces are there?

11. There are 168 children in a nursery. Each room can hold six children. Work out the minimum number of rooms required to ensure each child is allocated to a room.

12. A pack of biscuits costs 85p. Each pack contains 12 biscuits. Arjun wants to buy 48 biscuits. Work out how much money Arjun will spend. Give your answer in pounds.

13. Four friends meet for lunch. Their total bill is £39.20 plus a £6 tip. Assuming the friends share the bill evenly, work out how much each person will pay.

14. Amira is making bracelets. She spends £13 on materials, then sells 47 bracelets for £3 each. Work out how much profit Amira will make.

15. Romana buys packs of stickers. She buys 3 packs which each contain 40 stickers, 2 packs which each contain 27 stickers and 5 packs which each contain 12 stickers. Work out the total number of stickers Romana has.

Challenge:

Jericho bought a car for £12 400. He pays a deposit of £850, then asks to pay the remaining amount off over 5 years. For this to happen, he must pay a 10% surcharge on the remaining amount. Work out how much money Jericho will pay each year.

Hint: To calculate 10% of a number, divide it by 10.

The Four Operations Word Problems: Bronze **Answers**

1. Eleanor has 18 marbles. Benji has 35 marbles. Work out the total number of marbles that Eleanor and Benji have between them.

   18 + 35 = 53 marbles

2. Sajid receives £136 for his birthday. He spends £41 and saves the rest. Work out how much money Sajid saves.

   136 – 41 = £95

3. Ethan has 9 bags. Each bag contains 8 beads. Work out the total number of beads that Ethan has.

   9 × 8 = 72 beads

4. Mai has a bag containing 42 sweets. She wants to share these sweets equally between 7 friends. How many sweets will each friend receive?

   42 ÷ 7 = 6 sweets

5. A car park has 135 spaces on the ground floor, 109 spaces on the first floor and 72 on the second floor. Work out the total number of spaces in the car park.

   135 + 109 + 72 = 316 spaces

6. There are six rulers in a pack. Mr Jones needs to buy enough rulers for 30 students. How many packs should he buy?

   30 ÷ 6 = 5 packs

7. In 2016, Alexia used 1402 units of electricity. In 2017, Alexia used 173 more units of electricity than in 2016. Calculate how many units of electricity Alexia used in 2017.

   1402 + 173 = 1575 units

8. Lewis has 14 075 photos stored in the cloud. His brother has 19 881 photos. How many more photos does Lewis' brother have?

   19 881 – 14 075 = 5806 photos

9. Paulo walks 3 miles per day. Work out the total number of miles that Paulo will walk in 4 weeks.

   3 × 7 × 4 = 84 miles in total

10. On a school trip, there are 18 teachers and 175 students. There are enough spaces for 210 people in total. How many extra spaces are there?

    18 + 175 = 193

    210 – 193 = 17 spaces

11. There are 168 children in a nursery. Each room can hold six children. Work out the minimum number of rooms required to ensure each child is allocated to a room.

    168 ÷ 6 = 28 rooms

12. A pack of biscuits costs 85p. Each pack contains 12 biscuits. Arjun wants to buy 48 biscuits. Work out how much money Arjun will spend. Give your answer in pounds.

    48 ÷ 12 = 4

    4 × 85 = 340p

    = £3.40

13. Four friends meet for lunch. Their total bill is £39.20 plus a £6 tip. Assuming the friends share the bill evenly, work out how much each person will pay.

    39.20 + 6 = 45.20

    45.20 ÷ 4 = £11.30 each

14. Amira is making bracelets. She spends £13 on materials, then sells 47 bracelets for £3 each. Work out how much profit Amira will make.

    47 × 3 = 141

    141 – 13 = £128 profit

15. Romana buys packs of stickers. She buys 3 packs which each contain 40 stickers, 2 packs which each contain 27 stickers and 5 packs which each contain 12 stickers. Work out the total number of stickers Romana has.

    3 × 40 = 120

    2 × 27 = 54

    5 × 12 = 60

    120 + 54 + 60 = 234 stickers

Challenge:

Jericho bought a car for £12 400. He pays a deposit of £850, then asks to pay the remaining amount off over 5 years. For this to happen, he must pay a 10% surcharge on the remaining amount. Work out how much money Jericho will pay each year.

Hint: To calculate 10% of a number, divide it by 10.

12 400 – 850 = 11 550

10% of 11 550 = 1155

11 550 + 1155 = 12 705

12 705 ÷ 5 = £2541 per year

The Four Operations Word Problems: Gold

1. Eleanor has 73 marbles. Benji has 28 more marbles than Eleanor. They combine their marbles then share them evenly between them. Work out the how many marbles they will each get.

2. Sajid receives £132 for his birthday. He spends £46.50 on clothes, £39.80 on a computer game and saves the rest. Work out how much money Sajid saves.

3. Ethan has 19 bags of beads. Each bag contains 17 beads, except one bag which contains 32 beads. Work out the total number of beads that Ethan has.

4. Mai has a bag containing 216 sweets. She wants to share these sweets equally between 12 friends. How many sweets will each friend receive?

5. In 2016, Alexia used 3967 units of electricity. In 2017, Alexia used 4050 units of electricity. Each unit costs 12p. Work out how much more money Alexia spent on electricity in 2017 compared to 2016.

6. A car park has 135 free spaces on the ground floor, 109 free spaces on the first floor and 72 free spaces on the second floor. 37 cars leave and 45 cars enter the car park. Work out the total number of free spaces in the car park now.

7. A pack of 6 rulers costs £1.18. Mr Jones needs to buy enough rulers for 30 students. How much money will Mr Jones spend on rulers?

8. Lewis has 14 075 photos stored in the cloud. His brother has 19 881 photos. Each photo takes up 2.5MB of storage. How much more storage space does Lewis' brother require to store his photos?

9. Paulo walks 3.75 miles per day. Work out the total number of miles that Paulo will walk in 4 weeks.

10. On a school trip, there are 29 teachers and 349 students. They travel on minibuses which can hold up to 15 people. Work out how many spare seats there will be.

11. There are 1900 students in a school. Each classroom can hold 35 students. Work out the minimum number of classrooms required to ensure each student is allocated to a room.

12. A pack of 14 biscuits costs £1.17. A cake costs £2.19. Arjun wants to buy 98 biscuits and 3 cakes. Work out how much money Arjun will spend.

13. Bella and three of her friends meet for lunch. Their total bill is £39.20 plus a 15% tip. Assuming they share the bill evenly, work out how much each person will pay.

14. Amira is making bracelets. She spends £13.90 on materials, then sells 47 bracelets for £3.20 each. Work out how much profit Amira will make.

15. Romana buys packs of stickers. She buys 3 packs which each contain 40 stickers, 2 packs which each contain 27 stickers and 5 packs which each contain 12 stickers. She then sells each sticker for 35p. Work out the total amount of money she makes from selling all her stickers.

Challenge:

Jericho bought a car for £12 400. He pays a deposit of £850, then asks to pay the remaining amount off over 5 years. For this to happen, he must pay a 15% surcharge on the remaining amount. Work out how much money Jericho will pay each year.

The Four Operations Word Problems: Gold **Answers**

1. Eleanor has 73 marbles. Benji has 28 more marbles than Eleanor. They combine their marbles then share them evenly between them. Work out the how many marbles they will each get.

   73 + 28 = 101

   101 + 73 = 174

   174 ÷ 2 = 87 marbles

2. Sajid receives £132 for his birthday. He spends £46.50 on clothes, £39.80 on a computer game and saves the rest. Work out how much money Sajid saves.

   132 – (46.50 + 39.80) = £45.70

3. Ethan has 19 bags of beads. Each bag contains 17 beads, except one bag which contains 32 beads. Work out the total number of beads that Ethan has.

   18 × 17 = 306

   306 + 32 = 338 beads

4. Mai has a bag containing 216 sweets. She wants to share these sweets equally between 12 friends. How many sweets will each friend receive?

   216 ÷ 12 = 18 sweets

5. In 2016, Alexia used 3967 units of electricity. In 2017, Alexia used 4050 units of electricity. Each unit costs 12p. Work out how much more money Alexia spent on electricity in 2017 compared to 2016.

   4050 – 3967 = 83

   83 × 12 = 996p or £9.96

6. A car park has 135 free spaces on the ground floor, 109 free spaces on the first floor and 72 free spaces on the second floor. 37 cars leave and 45 cars enter the car park. Work out the total number of free spaces in the car park now.

   135 + 109 + 72 + 37 – 45 = 308 spaces

7. A pack of 6 rulers costs £1.18. Mr Jones needs to buy enough rulers for 30 students. How much money will Mr Jones spend on rulers?

   30 ÷ 6 = 5

   5 × 1.18 = £5.90

8. Lewis has 14 075 photos stored in the cloud. His brother has 19 881 photos. Each photo takes up 2.5MB of storage. How much more storage space does Lewis' brother require to store his photos?

   19 881 – 14 075 = 5806

   5806 × 2.5 = 14 515MB or 14.515GB

9. Paulo walks 3.75 miles per day. Work out the total number of miles that Paulo will walk in 4 weeks.

   3.75 × 7 × 4 = 105 miles

10. On a school trip, there are 29 teachers and 349 students. They travel on minibuses which can hold up to 15 people. Work out how many spare seats there will be.

    29 + 349 = 378

    378 ÷ 15 = 25 r 3

    They will need 26 minibuses. The last minibus will have 3 students on it, so there will be 12 spare seats.

11. There are 1900 students in a school. Each classroom can hold 35 students. Work out the minimum number of classrooms required to ensure each student is allocated to a room.

    1900 ÷ 35 = 54 r 10

    The minimum number of classrooms is 55.

12. A pack of 14 biscuits costs £1.17. A cake costs £2.19. Arjun wants to buy 98 biscuits and 3 cakes. Work out how much money Arjun will spend.

    98 ÷ 14 = 7

    (7 × 1.17) + (3 × 2.19) = £14.76

13. Bella and three of her friends meet for lunch. Their total bill is £39.20 plus a 15% tip. Assuming they share the bill evenly, work out how much each person will pay.

    15% of 39.20 = 5.88

    39.20 + 5.88 = 45.08

    45.08 ÷ 4 = £11.27

14. Amira is making bracelets. She spends £13.90 on materials, then sells 47 bracelets for £3.20 each. Work out how much profit Amira will make.

    47 × 3.20 = 150.40

    150.40 – 13.90 = £136.50 profit

15. Romana buys packs of stickers. She buys 3 packs which each contain 40 stickers, 2 packs which each contain 27 stickers and 5 packs which each contain 12 stickers. She then sells each sticker for 35p. Work out the total amount of money she makes from selling all her stickers.

    3 × 40 = 120

    2 × 27 = 54

    5 × 12 = 60

    120 + 54 + 60 = 234 stickers

    234 × 35 = 8190p or £81.90

Challenge:

Jericho bought a car for £12 400. He pays a deposit of £850, then asks to pay the remaining amount off over 5 years. For this to happen, he must pay a 15% surcharge on the remaining amount. Work out how much money Jericho will pay each year.

12 400 – 850 = 11 550

15% of 11 550 = 1732.50

11 550 + 1732.50 = 13 282.50

13 282.50 ÷ 5 = £2656.50 per year

The Four Operations Word Problems: Silver

1. Eleanor has 73 marbles. Benji has 28 more marbles than Eleanor. Work out the total number of marbles that Eleanor and Benji have between them.

2. Sajid receives £132 for his birthday. He spends £46 on clothes, £39 on a computer game and saves the rest. Work out how much money Sajid saves.

3. Ethan has 9 bags of beads. Each bag contains 17 beads. Work out the total number of beads that Ethan has.

4. Mai has a bag containing 168 sweets. She wants to share these sweets equally between 6 friends. How many sweets will each friend receive?

5. In 2016, Alexia used 3967 units of electricity. In 2017, Alexia used 428 more units of electricity than in 2016. Calculate how many units of electricity Alexia used in 2017.

6. A car park has 135 free spaces on the ground floor, 109 free spaces on the first floor and 72 free spaces on the second floor. 37 cars leave. Assuming no more cars enter the car park, work out the total number of spaces in the car park after these cars have left.

7. A pack of 6 rulers costs £1.20. Mr Jones needs to buy enough rulers for 30 students. How much money will Mr Jones spend on rulers?

8. Lewis has 14 075 photos stored in the cloud. His brother has 19 881 photos. Each photo takes up 3MB of storage. How much more storage space does Lewis' brother require to store his photos?

9. Paulo walks 3.5 miles per day. Work out the total number of miles that Paulo will walk in 4 weeks.

10. On a school trip, there are 18 teachers and 175 students. They travel on minibuses which can hold up to 15 people. Work out how many minibuses they will need.

11. There are 168 students in a school. Each classroom can hold 18 students. Work out the minimum number of classrooms required to ensure each student is allocated to a room.

12. A pack of biscuits costs £1.17. Each pack contains 12 biscuits. Arjun wants to buy 48 biscuits. Work out how much money Arjun will spend.

13. Four friends meet for lunch. Their total bill is £39.20 plus a 10% tip. Assuming the friends share the bill evenly, work out how much each person will pay.

    Remember: To find 10% of a number, divide it by 10.

14. Amira is making bracelets. She spends £13.90 on materials, then sells 20 bracelets for £3.20 each. Work out how much profit Amira will make.

15. Romana buys packs of stickers. She buys 3 packs which each contain 40 stickers, 2 packs which each contain 27 stickers and 5 packs which each contain 12 stickers. She then sells each sticker for 30p. Work out the total amount of money she makes from selling all of her stickers.

Challenge:

Jericho bought a car for £12 400. He pays a deposit of £850, then asks to pay the remaining amount off over 5 years. For this to happen, he must pay a 20% surcharge on the remaining amount. Work out how much money Jericho will pay each year.

The Four Operations Word Problems: Silver **Answers**

1. Eleanor has 73 marbles. Benji has 28 more marbles than Eleanor. Work out the total number of marbles that Eleanor and Benji have between them.

   73 + 28 = 101

   101 + 73 = 174 marbles

2. Sajid receives £132 for his birthday. He spends £46 on clothes, £39 on a computer game and saves the rest. Work out how much money Sajid saves.

   132 – (46 + 39) = £47

3. Ethan has 9 bags of beads. Each bag contains 17 beads. Work out the total number of beads that Ethan has.

   9 × 17 = 153 beads

4. Mai has a bag containing 168 sweets. She wants to share these sweets equally between 6 friends. How many sweets will each friend receive?

   168 ÷ 6 = 28 sweets

5. In 2016, Alexia used 3967 units of electricity. In 2017, Alexia used 428 more units of electricity than in 2016. Calculate how many units of electricity Alexia used in 2017.

   3967 + 428 = 4395 units

6. A car park has 135 free spaces on the ground floor, 109 free spaces on the first floor and 72 free spaces on the second floor. 37 cars leave. Assuming no more cars enter the car park, work out the total number of spaces in the car park after these cars have left.

   135 + 109 + 72 + 37 = 353 spaces

7. A pack of 6 rulers costs £1.20. Mr Jones needs to buy enough rulers for 30 students. How much money will Mr Jones spend on rulers?

   30 ÷ 6 = 5 packs

   5 × 1.20 = £6

8. Lewis has 14 075 photos stored in the cloud. His brother has 19 881 photos. Each photo takes up 3MB of storage. How much more storage space does Lewis' brother require to store his photos?

   19 881 – 14 075 = 5806 photos

   5806 × 3 = 17 418MB or 17.418GB

9. Paulo walks 3.5 miles per day. Work out the total number of miles that Paulo will walk in 4 weeks.

   3.5 × 7 × 4 = 98 miles

10. On a school trip, there are 18 teachers and 175 students. They travel on minibuses which can hold up to 15 people. Work out how many minibuses they will need.

    18 + 175 = 193

    193 ÷ 15 = 12 r 13

    They will need 13 minibuses.

11. There are 168 students in a school. Each classroom can hold 18 students. Work out the minimum number of classrooms required to ensure each student is allocated to a room.

    168 ÷ 18 = 9 r 6

    The minimum number of classrooms is 10.

12. A pack of biscuits costs £1.17. Each pack contains 12 biscuits. Arjun wants to buy 48 biscuits. Work out how much money Arjun will spend.

    48 ÷ 12 = 4 packs

    4 × 1.17 = £4.68

13. Four friends meet for lunch. Their total bill is £39.20 plus a 10% tip. Assuming the friends share the bill evenly, work out how much each person will pay.

    Remember: To find 10% of a number, divide it by 10.

    10% of 39.20 = 3.92

    39.20 + 3.92 = 43.12

    43.12 ÷ 4 = £10.78

14. Amira is making bracelets. She spends £13.90 on materials, then sells 20 bracelets for £3.20 each. Work out how much profit Amira will make.

    20 × 3.20 = 64

    64 – 13.90 = £50.10 profit

15. Romana buys packs of stickers. She buys 3 packs which each contain 40 stickers, 2 packs which each contain 27 stickers and 5 packs which each contain 12 stickers. She then sells each sticker for 30p. Work out the total amount of money she makes from selling all of her stickers.

    3 × 40 = 120

    2 × 27 = 54

    5 × 12 = 60

    120 + 54 + 60 = 234 stickers

    234 × 30 = 7020p or £70.20

Challenge:

Jericho bought a car for £12 400. He pays a deposit of £850, then asks to pay the remaining amount off over 5 years. For this to happen, he must pay a 20% surcharge on the remaining amount. Work out how much money Jericho will pay each year.

12 400 – 850 = £11 550

20% of 11 550 = £2310

11 550 + 2310 = £13 860

13 860 ÷ 5 = £2772 per year