Year 6 · Number: Order, Operations & Sharing Out

Name: _____ Date: _____

Kia ora! This sheet gives you practice with the order of operations, adding and subtracting big numbers, multiplying by two-digit numbers, and dividing with remainders. Take your time and show your working.

Warm-up

1. Work out: $6 + 4 \times 3$

2. Add: $348 + 275$

3. Subtract: $500 - 236$

4. Work out: $20 \div 4 + 5$

Practice

5. Use the order of operations: $84 - 6 \times 9$

6. Use the order of operations: $6^2 + 40 \div 5$

7. Multiply: 487×18

8. The Waterview School gala raised $3475 on Saturday and $2896 on Sunday. The stalls and prizes cost $1580. How much profit did the gala make?

9. A netball club has 158 balls. They want to share them equally into 6 storage bins. Using 1/6 of 158, how many balls go in each bin, and how many are left over?

10. Aroha pours 1450 mL of juice equally into 4 cups. How much juice is in each cup? Give your answer as a decimal.

Challenge

11. Work out: $3^2 \times (144 \div 12) - 45$

12. The Titirangi Sports Club buys 24 boxes of shirts. Each box holds 36 shirts. The shirts are shared equally among 5 teams. How many shirts does each team get, and how many are left over?

Answer key (for parents and tutors)

1. Work out: 6 + 4 × 3
   Do multiplication first: 4 × 3 = 12. Then add: 6 + 12 = 18. Answer: 18.

2. Add: 348 + 275
   348 + 275. Ones: 8 + 5 = 13 (write 3, carry 1). Tens: 4 + 7 + 1 = 12 (write 2, carry 1). Hundreds: 3 + 2 + 1 = 6. Answer: 623.

3. Subtract: 500 − 236
   500 − 236. Rename: 500 becomes 4 hundreds, 9 tens, 10 ones. Ones: 10 − 6 = 4. Tens: 9 − 3 = 6. Hundreds: 4 − 2 = 2. Answer: 264.

4. Work out: 20 ÷ 4 + 5
   Do division first: 20 ÷ 4 = 5. Then add: 5 + 5 = 10. Answer: 10.

5. Use the order of operations: 84 − 6 × 9
   Multiplication first: 6 × 9 = 54. Then subtract: 84 − 54 = 30. Answer: 30.

6. Use the order of operations: 6^2 + 40 ÷ 5
   Exponent first: 6^2 = 36. Then division: 40 ÷ 5 = 8. Then add: 36 + 8 = 44. Answer: 44.

7. Multiply: 487 × 18
   Split 18 into 10 and 8. 487 × 10 = 4870. 487 × 8 = 3896. Add them: 4870 + 3896 = 8766. Answer: 8766.

8. The Waterview School gala raised $3475 on Saturday and $2896 on Sunday. The stalls and prizes cost $1580. How much profit did the gala make?
   First add the two days: 3475 + 2896 = 6371. Then take away the costs: 6371 − 1580 = 4791. Answer: The gala made $4791 profit.

9. A netball club has 158 balls. They want to share them equally into 6 storage bins. Using 1/6 of 158, how many balls go in each bin, and how many are left over?
   Finding 1/6 of 158 is the same as 158 ÷ 6. 6 × 26 = 156, so 158 ÷ 6 = 26 remainder 2. As balls are whole objects, each bin gets 26 balls, with 2 balls left over. (As a fraction this would be 26 2/6 = 26 1/3.)

10. Aroha pours 1450 mL of juice equally into 4 cups. How much juice is in each cup? Give your answer as a decimal.
    1450 ÷ 4. 4 × 362 = 1448, so 1450 ÷ 4 = 362 remainder 2. The remainder 2 out of 4 is 2/4 = 0.5. Answer: 362.5 mL in each cup.

11. Work out: 3^2 × (144 ÷ 12) − 45
    Brackets first: 144 ÷ 12 = 12. Exponent next: 3^2 = 9. Then multiply: 9 × 12 = 108. Then subtract: 108 − 45 = 63. Answer: 63.

12. The Titirangi Sports Club buys 24 boxes of shirts. Each box holds 36 shirts. The shirts are shared equally among 5 teams. How many shirts does each team get, and how many are left over?
    First find the total: 24 × 36. 24 × 30 = 720, 24 × 6 = 144, so 720 + 144 = 864 shirts. Now share among 5 teams: 864 ÷ 5. 5 × 172 = 860, so 864 ÷ 5 = 172 remainder 4. Answer: Each team gets 172 shirts, with 4 shirts left over.