Each letter stands for a mathematical operation.

BODMAS

Brackets

Orders

Division or Multiplication

Addition or Subtraction

Brackets	( )
Orders/Others	Orders are square roots or indices (sometimes called powers or exponents, square numbers and cube numbers). For example, 2^3: the little 3 means that you multiply the number 3 times, $2 \times 2 \times 2 = 8$. A square root is the inverse of a square number, so $\sqrt{25}$, the square root of 25, is 5 because 5×5 or 5^2 equals 25.
Division: ÷	Splitting into equal groups or parts
Multiplication: ×	Groups of
Addition: +	The total of numbers together
Subtraction: -	To take away numbers from other numbers

How Do I Remember It All … ? BODMAS !

B   **B**rackets first

O   **O**rders (i.e. Powers and Square Roots, etc.)

DM   **D**ivision and **M**ultiplication (left-to-right)

AS   **A**ddition and **S**ubtraction (left-to-right)

Divide and Multiply rank equally (and go left to right).

Add and Subtract rank equally (and go left to right)

So do it this way:

1.   2.   3.   4.

B   O   D or M   A or S

After you have done "B" and "O", just go from left to right doing any "D" *or* "M" as you find them.

Then go from left to right doing any "A" *or* "S" as you find them.

Note: the only strange name is "Orders". "Exponents" is used in Canada, and so you might prefer "BEDMAS". There is also "Indices" which makes it "BIDMAS". In the US they say "Parentheses" instead of Brackets, so it is " PEMDAS "

For each question, work out the common WRONG answer?

What is the correct answer?

Calculate:

$16 \div 4 + 8 = ?$ $16 + 4 \div 8 = ?$ $14 \times 7 + 8 \times 11 = ?$ $100 \div 4 \times 5 = ?$

Sarah has 7 bags with 5 sweets in each bag.
She adds one more sweet to each bag.
Which calculation will work out how many sweets she now has in total? Explain your answer.

$$7 \times (5 + 1)$$

$$7 \times 5 + 1$$

Daniel has completed the calculation and got an answer of 96

$$2(30 \div 5) + 14 = 96$$

Can you explain what he did and where he made the mistake?

Add brackets and missing numbers to make the calculations correct.

$$3 + \underline{\quad} \times 5 = 25$$

$$25 - 6 \times \underline{\quad} = 38$$

Write different number sentences using the digits 3, 4, 5 and 8 before the equals sign that use:

- One operation

- Two operations with no brackets

- Two operations with brackets

Try these to get the idea!

1. $6 + 4 \times 2 =$

2. $4 + 4 \div 2 =$
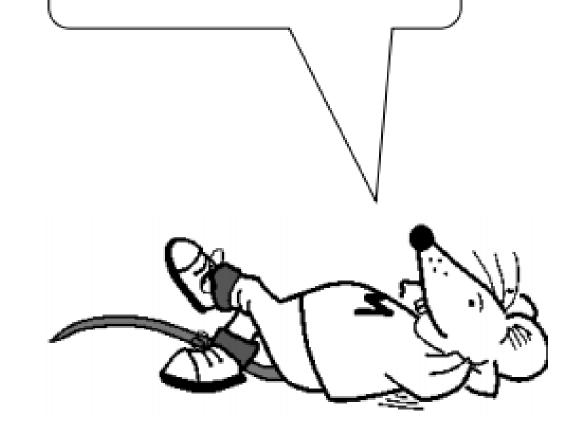
3. $8 + 6 - 3 =$

4. $5 + 5 \times 4 =$

5. $12 + 3 \times 2 =$

6. $2 \times 4 + 5 =$

Not as hard as I thought!
I can have a break now!

1. $100 - (20 \times 3) =$

2. $(35 - 15) + (27 - 7) =$

3. $15 + (6 \times 6) =$

4. $(4 + 5) \times (3 + 6) =$

5. $(5 + 5) \times (5 - 2) =$

6. $50 - (6 \times 6) =$

7. $(4 + 8) \times (3 - 2) =$

8. $(9 - 3) + (6 \times 6) =$

9. $(5 \times 7) - (2 \times 5) =$

10. $56 - (4 \times 7) =$

11. $78 - (10 \times 7) =$

12. $(7 \times 7) + (4 \times 8) =$

13. $(45 - 23) + (5 \times 8) =$

14. $38 - (5 \times 7) =$

15. $(100 - 45) + (7 \times 7) =$

16. $45 - (9 \times 4) =$

1. $(4 \times 2) + (3 \times 3) =$

2. $(4 \times 4) + (5 \times 5) =$

3. $(6 \times 6) - (4 \times 4) =$

4. $(9 \times 9) - (8 \times 8) =$

5. $18 - (4 \times 2) =$

6. $4 \times (4 - 2) =$

7. $18 - (9 \times 4) + 32 =$

8. $(12 \times 12) - (11 \times 12) =$

9. $30 - (5 \times 4) =$

10. $67 - (9 \times 5) =$

11. $(8 + 6) \times 4 =$

12. $8 \times 7 - 3 =$

13. $(4 \times 9) - (4 \times 8) =$

14. $56 - (5 \times 9) =$

15. $72 - (8 \times 7) + 9 =$

16. $(9 \times 8) + (9 \times 8) =$

ANSWERS

See the next slide for the answers

Try these to get the idea!

1. $6 + (4 \overset{8}{\times} 2) = 14$

2. $4 + (4 \overset{2}{\div} 2) = 6$

3. $8 + 6 - 3 = 11$

4. $5 + (5 \overset{20}{\times} 4) = 25$

5. $12 + (3 \overset{6}{\times} 2) = 18$

6. $\underset{8}{(2 \times 4)} + 5 = 13$

Not as hard as I thought!
I can have a break now!

1. $100 - (20 \times 3) = 40$ (60)

2. $(35 - 15) + (27 - 7) = 40$ (20, 20)

3. $15 + (6 \times 6) = 51$ (36)

4. $(4 + 5) \times (3 + 6) = 81$ (9, 9)

5. $(5 + 5) \times (5 - 2) = 30$ (10, 3)

6. $50 - (6 \times 6) = 14$ (36)

7. $(4 + 8) \times (3 - 2) = 12$ (12, 1)

8. $(9 - 3) + (6 \times 6) = 42$ (6, 36)

9. $(5 \times 7) - (2 \times 5) = 25$ (35, 10)

10. $56 - (4 \times 7) = 28$ (28)

11. $78 - (10 \times 7) = 8$ (70)

12. $(7 \times 7) + (4 \times 8) = 81$ (49, 32)

13. $(45 - 23) + (5 \times 8) = 62$ (22, 40)

14. $38 - (5 \times 7) = 3$ (35)

15. $(100 - 45) + (7 \times 7) = 104$ (55, 49)

16. $45 - (9 \times 4) = 9$ (36)

1. $(4 \overset{8}{\times} 2) + (3 \overset{9}{\times} 3) = 17$

2. $(4 \overset{16}{\times} 4) + (5 \overset{25}{\times} 5) = 41$

3. $(6 \overset{36}{\times} 6) - (4 \overset{16}{\times} 4) = 20$

4. $(9 \overset{81}{\times} 9) - (8 \overset{64}{\times} 8) = 17$

5. $18 - (4 \overset{8}{\times} 2) = 10$

6. $4 \times (4 \overset{2}{-} 2) = 8$

7. $18 - (9 \overset{36}{\times} 4) + 32 = 14$

8. $(12 \overset{144}{\times} 12) - (11 \overset{132}{\times} 12) = 12$

9. $30 - (5 \overset{20}{\times} 4) = 10$

10. $67 - (9 \overset{45}{\times} 5) = 22$

11. $(8 \overset{14}{+} 6) \times 4 = 56$

12. $(8 \overset{56}{\times} 7) - 3 = 53$

13. $(4 \overset{36}{\times} 9) - (4 \overset{32}{\times} 8) = 4$

14. $56 - (5 \overset{45}{\times} 9) = 11$

15. $72 - (8 \overset{56}{\times} 7) + 9 = 25$

16. $(9 \overset{72}{\times} 8) + (9 \overset{72}{\times} 8) = 144$