

# BODMAS

I can solve expressions using the order of operations.

Here are some multi-part expressions. Complete the underlined part of the expression first then use the answer to that to complete the expression.

Here is an example:  $3 \times (2 + 6)$   
 $3 \times 8 = 24$

1.  $7 \times (8 - 3)$

6.  $21 \div (4 + 3)$

11.  $9 \times (3 + 3)$

2.  $7 + 9 \times 2$

7.  $10 - 9 \div 3$

12.  $2^3 - (3 + 1)$

3.  $10 \div (6 - 4)$

8.  $7 + 6 \times 4$

13.  $(10 + 5) \div 5$

4.  $12 \div (7 - 4)$

9.  $(12 + 20) \div 4$

14.  $12 \div (7 - 4)$

5.  $(8 + 9) + 6^2$

10.  $(13 - 6) \times 5$

15.  $(11 - 3) \times 7$

Decide which part of each expression to calculate first, underline and complete as above.

1.  $(12 - 7) \times 8$

2.  $9 + 2 \times 7$

3.  $18 \div (8 - 2)$

# BODMAS

I can solve expressions using the order of operations.

1.  $(12 + 8) \div 4 =$        6.  $(21 - 9) \times 2 =$        11.  $(8 + 13) \div 7 =$

2.  $(5^2 + 10) \div 5 =$        7.  $8 \times 3 + 6 =$        12.  $25 - 11 \times 2 =$

3.  $(8 + 9) + 6^2 =$        8.  $3 \times (15 - 9) =$        13.  $(7^2 + 11) \div 5 =$

4.  $4 \times 6 - 14 =$        9.  $6^3 - (35 + 12) =$        14.  $9 \div (10 - 7) =$

5.  $18 \div (4 + 5) =$        10.  $(14 + 21) \div 5 =$        15.  $26 - 3 \times 7 =$

Complete these calculations by filling in the missing number.

1.  $4 \times \square - 25 = 23$

4.  $(5 + 9) \div \square = 2$

7.  $\square \div (7 - 2) = 3$

2.  $(26 - 10) \div \square = 4$

5.  $9 \times (12 - \square) = 63$

8.  $8^2 + (66 - \square) = 86$

3.  $60 = 5 \times (3 + \square)$

6.  $45 = (5 + \square) \times 5$

9.  $6 = \square \div (11 - 4)$

# BODMAS

I can solve expressions using the order of operations.

Calculate:

1.  $(3 + 6) \times (8 - 5) =$

6.  $8 \div (7 - 5) \times 6 =$

2.  $7 + 8 \times 9 - 4 =$

7.  $9 \times 3 + 18 \div 9 =$

3.  $8 \times (6 + 3) + 5 =$

8.  $(124 \div 2) \times 2^2 =$

4.  $(19 - 7) + 8^2 + 9 =$

9.  $23 - 3 \times (5 + 8) =$

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

10.  $8 + 7 \times (12 - 5) =$

Put brackets in the following to make the answers correct.

1.  $6 \times 7 - 4 \times 8 = 10$

6.  $8 \times 7 - 4 \div 6 = 4$

2.  $8 \times 9 - 5 - 6 = 26$

7.  $9 + 23 - 5 \times 5 = 7$

3.  $24 - 17 \times 8 - 16 = 40$

8.  $5 + 11 \div 7 - 3 = 4$

4.  $14 + 6 \times 4 - 32 = 6$

9.  $7 + 6 \times 12 - 7 = 37$

5.  $9 \times 7 - 6 \times 3 = 27$

10.  $15 + 9 \div 6 - 4 = 0$

Use all the following numbers to create an expression using order of operations: 3, 4, 6, 12

Using your own number cards, challenge a partner to find expressions with certain answers.

# BODMAS Answers

## Lower Ability

1.  $7 \times 5 = 35$
2.  $7 + 18 = 25$
3.  $10 \div 2 = 5$
4.  $12 - 3 = 4$
5.  $(8 + 9) + 6^2 = 53$
6.  $21 \div 7 = 3$
7.  $10 - 3 = 7$
8.  $7 + 24 = 31$
9.  $32 \div 4 = 8$
10.  $7 \times 5 = 35$
11.  $9 \times 6 = 54$
12.  $2^3 - (3 + 1) = 4$
13.  $15 \div 5 = 3$
14.  $12 \div 3 = 4$
15.  $8 \times 7 = 56$

## Middle Ability

1.  $(12 + 8) \div 4 = 5$
  2.  $(5^2 + 10) \div 5 = 7$
  3.  $(8 + 9) + 6^2 = 53$
  4.  $4 \times 6 - 14 = 10$
  5.  $18 \div (4 + 5) = 2$
  6.  $(21 - 9) \times 2 = 24$
  7.  $8 \times 3 + 6 = 30$
  8.  $3 \times (15 - 9) = 18$
  9.  $216 - (35 + 12) = 169$
  10.  $(14 + 21) \div 5 = 7$
  11.  $(8 + 13) \div 7 = 3$
  12.  $25 - 11 \times 2 = 3$
  13.  $(7^2 + 11) \div 5 = 12$
  14.  $9 \div (10 - 7) = 3$
  15.  $26 - 3 \times 7 = 5$
1.  $4 \times 12 - 25 = 23$
  2.  $(26 - 10) \div 2^2 = 4$
  3.  $60 = 5 \times (3 + 9)$
  4.  $(5 + 9) \div 7 = 2$
  5.  $9 \times (12 - 5) = 63$
  6.  $45 = (5 + 4) \times 5$
  7.  $15 \div (7 - 2) = 3$
  8.  $8^2 + (66 - 44) = 86$
  9.  $6 = 42 \div (11 - 4)$

## Higher Ability

1.  $(3 + 6) \times (8 - 5) = 27$
  2.  $7 + 8 \times 9 - 4 = 75$
  3.  $8 \times (6 + 3) + 5 = 77$
  4.  $(19 - 7) + 8^2 + 9 = 85$
  5.  $9 \times (5 + 6) + 4 = 103$
  6.  $8 \div (7 - 5) \times 6 = 24$
  7.  $9 \times 3 + 18 \div 9 = 29$
  8.  $(124 \div 2) \times 2^2 = 248$
  9.  $23 - 3 \times (5 + 8) = -16$
  10.  $8 + 7 \times (12 - 5) = 57$
1.  $(6 \times 7) - (4 \times 8) = 10$
  2.  $8 \times (9 - 5) - 6 = 26$
  3.  $(24 - 17) \times 8 - 16 = 40$
  4.  $14 + 6 \times 4 - 32 = 6$  (no brackets)
  5.  $9 \times (7 - 6) \times 3 = 27$
  6.  $8 \times (7 - 4) \div 6 = 4$
  7.  $9 + 23 - 5 \times 5 = 7$  (no brackets)
  8.  $(5 + 11) \div (7 - 3) = 4$
  9.  $7 + 6 \times (12 - 7) = 37$
  10.  $(15 + 9) \div 6 - 4 = 0$

Possible answers:

- |                                |                                     |
|--------------------------------|-------------------------------------|
| $12 - 3 \times 4 + 6 = 6$      | $12 - 3 \times 4 + 6 = 6$           |
| $6 + 4 + 3 - 12 = 1$           | $(4 \times 3) - (12 \div 6) = 10$   |
| $12 \div 6 \times (4 - 3) = 2$ | $(12 \times 3) - (6 \times 4) = 12$ |
| $12 \div 6 + 4 - 3 = 3$        | $(4 + 6) \times 3 - 12 = 18$        |
| $6 \times 4 \div 12 + 3 = 5$   | $(4 + 6) \times 12 \div 3 = 40$     |