Order of Operations (involving addition, subtraction, multiplication & division)

Grade 6 Expressions & Equations Worksheet

Date:_____ Name:_____

Evaluate each expression using the order of operations (**PEMDAS**).

Note: **MD** (Multiplication and Division is from Left to Right); **AS** (Addition and Subtraction is from Left to Right)

1. $3 \times 19 \times 14 + 18 \div 2 =$ ☐

Workings:

2. $14 + 18 \div 2 \times 18 - 7 =$ ☐

Workings:

3. $2 \times 10 + 10 - 8 =$ ☐

Workings:

4. $18 \div 6 + 4 \times 15 =$ ☐

Workings:

5. $11 \times 11 - 6 \times 17 + 4 =$ ☐

Workings:

SmartMathz

Order of Operations (involving addition, subtraction, multiplication & division)

Grade 6 Expressions & Equations Answer Sheet

1. $3 \times 19 \times 14 + 18 \div 2 =$ **807**

Workings:

$3 \times 19 \times 14 + 18 \div 2$	**First, multiply** $3 \times 19 = 57$
$= 57 \times 14 + 18 \div 2$	**Next, multiply** $57 \times 14 = 798$
$= 798 + 18 \div 2$	**Then, divide** $18 \div 2 = 9$
$= 798 + 9$	**Finally, add** $798 + 9 = 807$
$=$ **807**	

2. $14 + 18 \div 2 \times 18 - 7 =$ **169**

Workings:

$14 + 18 \div 2 + \times 18 - 7$	**First, divide** $18 \div 2 = 9$
$= 14 + 9 + \times 18 - 7$	**Then, multiply** $9 \times 18 = 162$
$= 14 + 162 - 7$	**Next, add** $14 + 162 = 176$
$= 176 - 7$	**Finally, subtract** $176 - 7 = 169$
$=$ **169**	

3. $2 \times 10 + 10 - 8 =$ **22**

Workings:

$2 \times 10 + 10 - 8$	**First, multiply** $2 \times 10 = 20$
$= 20 + 10 - 8$	**Next, add** $20 + 10 = 30$
$= 30 - 8$	**Finally, subtract** $30 - 8 = 22$
$=$ **22**	

4. $18 \div 6 + 4 \times 15 =$ **63**

Workings:

$18 \div 6 + 4 \times 15$	**First, divide** $18 \div 6 = 3$
$= 3 + 4 \times 15$	**Then, multiply** $4 \times 15 = 60$
$= 3 + 60$	**Finally, add** $3 + 60 = 63$
$=$ **63**	

5. $11 \times 11 - 6 \times 17 + 4 =$ **23**

Workings:

$11 \times 11 - 6 \times 17 + 4$	**First, multiply** $11 \times 11 = 121$
$= 121 - 6 \times 17 + 4$	**Then, multiply** $6 \times 17 = 102$
$= 121 - 102 + 4$	**Next, subtract** $121 - 102 = 19$
$= 19 + 4$	**Finally, add** $19 + 4 = 23$
$=$ **23**	