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. $7 - 24 \div 8 \times 4 + 3 =$ ☐

Workings:

2. $15 \div 3 - 7 + 7 \times 5 =$ ☐

Workings:

3. $6 \times 5 \div 15 + 72 \div 8 - 7 =$ ☐

Workings:

4. $7 \times 4 + 9 - 9 + 17 =$ ☐

Workings:

5. $16 \times 15 \div 10 + 12 =$ ☐

Workings:

Grade 6 Expressions & Equations Answer Sheet

1. $7 - 24 \div 8 \times 4 + 3 = \boxed{\textbf{-2}}$

Workings:

$7-24\div8\times4+3$ **First, divide** $24\div8=3$

$= 7-3\times4+3$ **Next, multiply** $3\times4=12$

$= 7-12+3$ **Then, subtract** $7-12=-5$

$= -5+3$ **Finally, add** $-5+3=-2$

$= \textbf{-2}$

2. $15 \div 3 - 7 + 7 \times 5 = \boxed{\textbf{33}}$

Workings:

$15\div3-7+7\times5$ **First, divide** $15\div3=5$

$= 5-7+7\times5$ **Next, multiply** $7\times5=35$

$= 5-7+35$ **Then, subtract** $5-7=-2$

$= -2+35$ **Finally, add** $-2+35=33$

$= \textbf{33}$

3. $6 \times 5 \div 15 + 72 \div 8 - 7 = \boxed{\textbf{4}}$

Workings:

$6\times5\div15+72\div8-7$ **First, multiply** $6\times5=30$

$= 30\div15+72\div8-7$ **Next, divide** $30\div15=2$

$= 2+72\div8-7$ **Then, divide** $72\div8=9$

$= 2+9-7$ **Next, add** $2+9=11$

$= 11-7$ **Finally, subtract** $11-7=4$

$= \textbf{4}$

4. $7 \times 4 + 9 - 9 + 17 = \boxed{\textbf{45}}$

Workings:

$7\times4+9-9+17$ **First, multiply** $7\times4=28$

$= 28+9-9+17$ **Then, add** $28+9=37$

$= 37-9+17$ **Then, subtract** $37-9=28$

$= 28+17$ **Finally, add** $28+17=45$

$= \textbf{45}$

5. $16 \times 15 \div 10 + 12 = \boxed{\textbf{36}}$

Workings:

$16\times15\div10+12$ **First, multiply** $16\times15=240$

$= 240\div10+12$ **Then, divide** $240\div10$

$= 24+12$ **Finally, add** $24+12=36$

$= \textbf{36}$