**Answers:**

**Part 1:** What does PEMDAS stand for?

Subtraction

Addition

Division

Multiplication

Exponent

Parentheses

s

A

D

M

E

P

**Part 2:** Evaluate the following numerical expressions.

1. $6×\left(5-2\right)+4÷2$

$$6×3+4÷2$$

$$18+4÷2$$

$$18+2$$

$$20$$

1. $\left(16-6\right)÷2+(4×5)$

$$10÷2+(4×5)$$

$$10÷2+20$$

$$5+20$$

$$25$$

1. $\left(10+8\right)÷3+6×\left(8-4\right)$

$$18÷3+6×\left(8-4\right)$$

$$18÷3+6×4$$

$$6+6×4$$

$$6+24$$

$$30$$

1. $8×(6-5)-16÷\left(4×2\right)$

$$8×1-16÷\left(4×2\right)$$

$$8×1-16÷8$$

$$8-16÷8$$

$$8-2$$

$$6$$

1. $\left(10+8\right)÷3+6×\left(8-4\right)$

$$18÷3+6×\left(8-4\right)$$

$$18÷3+6×4$$

$$6+6×4$$

$$6+24$$

$$30$$

1. $25×\left(10-5\right)+[9-\left(4×2\right)]$

$$25×\left(10-5\right)+[9-8]$$

$$25×\left(10-5\right)+1$$

$$25×5+1$$

$$125+1$$

$$126$$

1. $\left[9×\left(27÷3\right)\right]+\left[81÷\left(27÷3\right)\right]-9$

$$\left[9×9\right]+\left[81÷\left(27÷3\right)\right]-9$$

$$81+\left[81÷\left(27÷3\right)\right]-9$$

$$81+\left[81÷9\right]-9$$

$$81+9-9$$

$$90-9$$

$$81$$

1. $\left[\left(9-6\right)×\left(8+7\right)\right]÷[15÷(9-4)×5]$

$$\left[3×\left(8+7\right)\right]÷[15÷(9-4)×5]$$

$$\left[3×15\right]÷[15÷(9-4)×5]$$

$$45÷[15÷(9-4)×5]$$

$$45÷[15÷5×5]$$

$$45÷[3×5]$$

$$45÷15$$

$$3$$

**Part 3:** Solve the following problems.

1. A cookie shop is giving away packs of cookies at a lower price. Originally, each pack cost $25. But for a limited time, they’re offering a $10 discount for every pack bought. May and Joy bought 8 packs, and both decided to share the cost.
2. Write a numerical expression to represent the above.

Solution: $(25-10)×8÷2$

1. How much money do May and Joy have to pay to share the cost?

Solution: $(25-10)×8÷2$

 $15×8÷2$

 $120÷2$

 $60$

 May and Joy have to pay $60 each.

1. Nick withdrew $3000 from his bank account. He gave his wife $1000, divided the remaining amount into 4, gave 3 parts to his 3 children equally, and kept 1 for himself. He bought 3 new pairs of shoes for $75 each pair.
2. Write a numerical expression to represent the above.

Solution: $\left(3000-1000\right)÷4-(3×75)$

1. How much money does Nick have left?

Solution: $\left(3000-1000\right)÷4-(3×75)$

 $2000÷4-(3×75)$

 $2000÷4-225$

 $500-225$

 $275$

**Nick has $275 left.**