Order of Operations with Parentheses

Assignment **Math 5**

Part 1: What does PEMDAS stand for?

| P | D | |
|---|---|--|
| | A | |
| | 5 | |

Order of Operations with Parentheses

Assignment **Math 5**

Part 2: Evaluate the following numerical expressions.

1.
$$6 \times (5-2) + 4 \div 2$$

2.
$$(16-6) \div 2 + (4 \times 5)$$

3.
$$(10+8) \div 3 + 6 \times (8-4)$$

4.
$$8 \times (6-5) - 16 \div (4 \times 2)$$

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Math 5

5.
$$(10 + 8) \div 3 + 6 \times (8 - 4)$$

6.
$$25 \times (10 - 5) + [9 - (4 \times 2)]$$

7.
$$[9 \times (27 \div 3)] + [81 \div (27 \div 3)] - 9$$

8.
$$[(9-6)\times(8+7)] \div [15\div(9-4)\times5]$$

| Name: | Period: | Date: | |
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Part 3: Solve the following problems.

- A cookie shop is giving away packs of cookies at a cheaper price. Originally, each pack costs \$25. But for a limited time, they're offerinig a \$10 discount for every pack bought. May and Joy bought 8 packs and both decided to share the cost.
 - a. Write a numerical expression to represent the situation above.

b. How much money does May and Joy have to share?

| Name: | Period: | Date: | |
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Order of Operations with Parentheses

Assignment

Math 5

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

b. How much money does Nick have left?

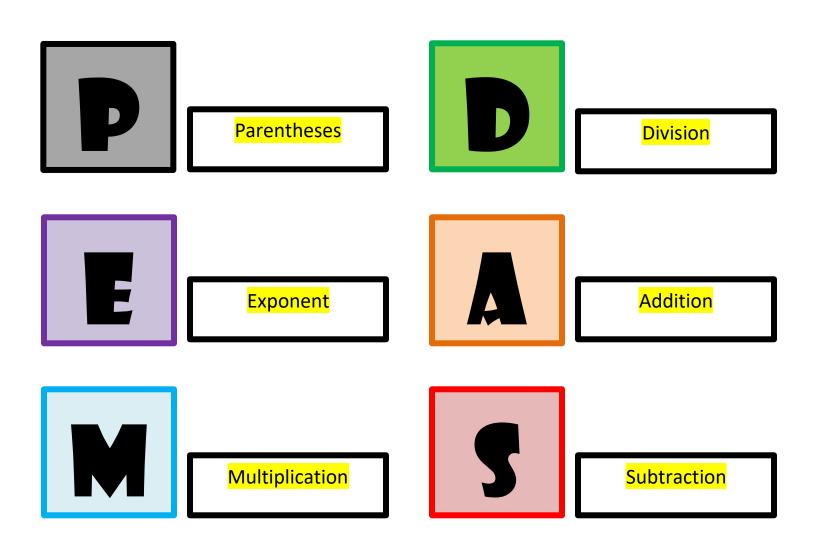
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Answers:

Part 1: What does PEMDAS stand for?



Name: Period: Date: _____

Order of Operations with Parentheses

Assignment

Math 5

Part 2: Evaluate the following numerical expressions.

1.
$$6 \times (5-2) + 4 \div 2$$

 $6 \times 3 + 4 \div 2$
 $18 + 4 \div 2$
 $18 + 2$

2.
$$(16-6) \div 2 + (4 \times 5)$$

 $10 \div 2 + (4 \times 5)$
 $10 \div 2 + 20$
 $5 + 20$
25

3.
$$(10+8) \div 3 + 6 \times (8-4)$$

 $18 \div 3 + 6 \times (8-4)$
 $18 \div 3 + 6 \times 4$
 $6 + 6 \times 4$
 $6 + 24$
30

4.
$$8 \times (6 - 5) - 16 \div (4 \times 2)$$

 $8 \times 1 - 16 \div (4 \times 2)$
 $8 \times 1 - 16 \div 8$
 $8 - 16 \div 8$
 $8 - 2$

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5.
$$(10+8) \div 3 + 6 \times (8-4)$$

 $18 \div 3 + 6 \times (8-4)$
 $18 \div 3 + 6 \times 4$
 $6 + 6 \times 4$
 $6 + 24$
30

6.
$$25 \times (10 - 5) + [9 - (4 \times 2)]$$

 $25 \times (10 - 5) + [9 - 8]$
 $25 \times (10 - 5) + 1$
 $25 \times 5 + 1$
 $125 + 1$
 126

7.
$$[9 \times (27 \div 3)] + [81 \div (27 \div 3)] - 9$$

 $[9 \times 9] + [81 \div (27 \div 3)] - 9$
 $81 + [81 \div (27 \div 3)] - 9$
 $81 + [81 \div 9] - 9$
 $81 + 9 - 9$
 $90 - 9$
 81

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8.
$$[(9-6) \times (8+7)] \div [15 \div (9-4) \times 5]$$

 $[3 \times (8+7)] \div [15 \div (9-4) \times 5]$
 $[3 \times 15] \div [15 \div (9-4) \times 5]$
 $45 \div [15 \div (9-4) \times 5]$
 $45 \div [15 \div 5 \times 5]$
 $45 \div [3 \times 5]$
 $45 \div 15$

Order of Operations with Parentheses

Assignment

Math 5

Part 3: Solve the following problems.

- A cookie shop is giving away packs of cookies at a cheaper price. Originally, each pack costs \$25. But for a limited time, they're offerinig a \$10 discount for every pack bought. May and Joy bought 8 packs and both decided to share the cost.
 - a. Write a numerical expression to represent the situation above.

Solution: $(25-10) \times 8 \div 2$

b. How much money does May and Joy have to share?

Solution:
$$(25 - 10) \times 8 \div 2$$

 $15 \times 8 \div 2$
 $120 \div 2$
 60

May and Joy has to share \$60 each.

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

Solution: $(3000 - 1000) \div 4 - (3 \times 75)$

b. How much money does Nick have left?

Solution:
$$(3000 - 1000) \div 4 - (3 \times 75)$$

 $2000 \div 4 - (3 \times 75)$
 $2000 \div 4 - 225$
 $500 - 225$
 275

Nick has \$275 left.