

Topic: Grouping symbols with PEMDAS and order of operations

Question: Simplify the expression.

$$[(5 - 4)3 + 2(6 - 4)] + 2$$

Answer choices:

A 10

B 8

C 20

D 9



Solution: D

PEMDAS tells us that we have to perform the operations in the following order:

Parentheses

$$[(5 - 4)3 + 2(6 - 4)] + 2$$

$$[(1)3 + 2(2)] + 2$$

$$[3 + 4] + 2$$

$$[7] + 2$$

$$7 + 2$$

Exponents**Multiplication/Division****Addition/Subtraction**

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Topic: Grouping symbols with PEMDAS and order of operations

Question: Simplify the expression.

$$2 [(5 - 2) + 6] - (10 - 3)$$

Answer choices:

A 10

B 11

C 13

D 2



Solution: B

PEMDAS tells us that we have to perform the operations in the following order:

Parentheses

$$2 [(5 - 2) + 6] - (10 - 3)$$

$$2[3 + 6] - (7)$$

$$2[9] - (7)$$

Exponents**Multiplication/Division**

$$18 - 7$$

Addition/Subtraction

$$11$$



Topic: Grouping symbols with PEMDAS and order of operations

Question: Use the order of operations to simplify the expression.

$$-5 + 3 \cdot 4 - 6 + (2 - 4) - 3^2$$

Answer choices:

A -10

B -11

C 10

D 5



Solution: A

PEMDAS tells us that we have to perform the operations in the following order:

Parentheses

$$-5 + 3 \cdot 4 - 6 + (2 - 4) - 3^2$$

$$-5 + 3 \cdot 4 - 6 + (-2) - 3^2$$

Exponents

$$-5 + 3 \cdot 4 - 6 + (-2) - 9$$

Multiplication/Division

$$-5 + 12 - 6 - 2 - 9$$

Addition/Subtraction

$$7 - 6 - 2 - 9$$

$$1 - 2 - 9$$

$$-1 - 9$$

$$-10$$

