Topic: 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

9



Topic: 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: 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

$$7 - 6 - 2 - 9$$

$$1 - 2 - 9$$

$$-1 - 9$$