Topic: Symbols of inclusion

Question: Simplify the expression.

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

Answer choices:

A 10

B 8

C 20

D 9

Solution: D

PEMDAS and order of operations tells us that we have to do

P Parentheses

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

$$\left[(1)3+2(2)\right]+2$$

$$(3+4)+2$$

$$7+2$$

E Exponents

M Multiplication

D Division

A Addition

$$9$$

S Subtraction

Topic: Symbols of inclusion

Question: Simplify the expression.

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

Answer choices:

A 10

B 11

C 13

D 2

Solution: B

PEMDAS and order of operations tells us that we have to do

P Parentheses

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

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

$$2(9)-7$$

E Exponents

M Multiplication

$$18-7$$

D Division

A Addition

S Subtraction

$$11$$

Topic: Symbols of inclusion

Question: Simplify this expression.

$$3\{2[4+3(7-5)-4]\}$$

Answer choices:

A 216

B 60

C 36

D 24

Solution: C

To simplify

$$3\{2[4+3(7-5)-4]\}$$

first, work inside the parentheses.

$$(7-5)=2$$

Write 2 inside the parentheses.

$$3\{2[4+3(2)-4]\}$$

Second, work inside the brackets.

Multiply $3(2)=6$ and write 6 in place of $3(2)$.

$$3\{2[4+6-4]\}$$

Add $[4+6-4]=6$ and write 6 in place of $[4+6-4]$.

$$3\{2[6]\}$$

Third, work inside the braces.

$$\{2[6]\}=12$$

$$3\{12\}$$

Finally, multiply $3\{12\}$.

$$36$$