



# Writing Expressions and Sequences

Name: .....

Date: .....

A bus has  $p$  passengers on board when it arrives at a bus stop. 10 passengers get off and 14 get on. Which of the following is an expression, in terms of  $p$ , for the number of passengers on the bus when it leaves the bus stop?

$p + 4$       $p - 4$       $4p$       $p + 24$

**A**     **B**     **C**     **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Sweets cost 9 pence each. Rachel buys  $s$  sweets. Which of the following is an expression, in terms of  $s$ , for the total cost?

$9s$       $s/9$       $s + 9$       $9p$

**A**     **B**     **C**     **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify  $5x - 5$

$x$       $4x$       $5$       $5x - 5$

**A**     **B**     **C**     **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify  $3x + 4y + 5x - 6y$

A  B  C  D

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify  $5p - 4s - 3p - 2s$

A  B  C  D

Correct Answer: A B C D

Explanation:

.....

.....


.....

.....

.....

.....

Here is an isosceles triangle. Which of the following is an expression, in terms of  $a$  and  $b$ , for the perimeter of the triangle?



A  B  C  D

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

What is  $5y$  multiplied by  $2y$  in its simplest form?

A  B  C  D

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Here are the first five terms of an arithmetic sequence.  
 12, 19, 26, 33, 40

Which of the following is an expression, in terms of  $n$ , for the  $n$ th term of this sequence?

$7n + 12$      $7n + 5$      $n + 7$      $7n$

**A**    **B**    **C**    **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Here are the first five terms of an arithmetic sequence.  
 85, 77, 69, 61, 53

Which of the following is an expression, in terms of  $n$ , for the  $n$ th term of this sequence?

$8n + 5$      $n - 8$      $85 - 8n$      $93 - 8n$

**A**    **B**    **C**    **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

The  $n$ th term of a sequence is given by  $2n - 3$ . What is the 10<sup>th</sup> term of the sequence?

23    14    17    197

**A**    **B**    **C**    **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

The  $n$ th term of a sequence is  $100 - 7n$ . Which of the following is **not** a term in the sequence?

93    65    70    9

**A**    **B**    **C**    **D**

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....