

Algebra 1 - Structure of Algebraic Expressions - Quiz

Common Core A-SSE.A.1a, A-SSE.A.1b · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

Try these 10 multiple-choice questions on algebraic expressions (A-SSE.A.1). Pick one answer for each question, then read the explanation to see why it is right and which mistake the other choices come from. Retake the quiz until every answer feels easy.

Algebra 1 · Common Core State Standards: **A-SSE.A.1a, A-SSE.A.1b**

Questions

Question 1

$4x^2$

$+ 9x$

$- 6$

What is the coefficient of x in this expression?

- A. 4
- B. -6
- C. $9x$
- D. 9

Question 2

How many terms does $5x-7+2y+3$ have?

- A. 4
- B. 3
- C. 2
- D. 5

Question 3

Which pair are like terms?

- A. $8m$ and $3m^2$
- B. $8m$ and $-3m$
- C. $8m$ and $8n$
- D. $8m$ and 8

Question 4

Simplify $6x+4-2x-9$.

- A. $4x+5$
- B. $8x-5$
- C. $4x-5$
- D. $-5x$

Question 5

Hours h	Pay $12h + 15$
1	\$27
2	\$39
3	\$51

The pay table matches $12h+15$ dollars. What does 15 represent?

- A. Pay for each hour worked
- B. A fixed bonus paid once
- C. The number of hours worked
- D. Total pay after 15 hours

Question 6

Evaluate x^2-4x+3 when $x=-1$.

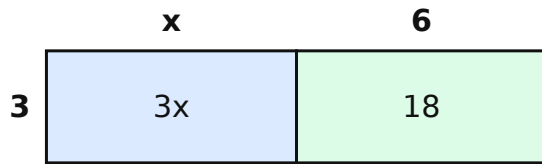
- A. 0
- B. -2
- C. 6
- D. 8

Question 7

Simplify $-3(x-5)$.

- A. $-3x-15$
- B. $-3x-5$
- C. $-3x+15$
- D. $3x-15$

Question 8



The area model shows the product of 3 and $x+6$. Which expression is equivalent?

- A. $3x+18$
- B. $3x+6$
- C. $x+18$
- D. $3x+9$

Question 9

Which expression means “4 less than the product of 5 and a number n ”?

- A. $5n-4$
- B. $4-5n$
- C. $5(n-4)$
- D. $5n+4$

Question 10

Simplify $2(x+3)+7(x+3)$ by treating $(x+3)$ as one quantity.

- A. $9x+3$
- B. $9(x+3)$
- C. $14(x+3)$
- D. $9(x+6)$

Answers

1. **D** – The coefficient is the number multiplying the variable: 9. Choosing 4 confuses the coefficient of x^2 .
2. **A** – The terms are $5x$, -7 , $2y$, and 3 , so there are 4. Do not count the signs or variables as separate terms.
3. **B** – Like terms have the same variable part, so $8m$ and $-3m$ match. The others differ in exponent, variable, or have no variable.
4. **C** – Combine $6x - 2x = 4x$ and $4 - 9 = -5$. Adding 4 and 9 ignores the minus sign.
5. **B** – The constant is the amount that does not change with h . The rate per hour is the coefficient 12.
6. **D** – Substitute: $1 + 4 + 3 = 8$. A common slip is treating $-4(-1)$ as -4 .
7. **C** – Multiply both terms by -3 : $-3x$ and $(-3)(-5) = +15$. The negative times negative must be positive.
8. **A** – Distribute 3 over both terms: $3x$ and 18 . Multiplying only the first term gives $3x + 6$.
9. **A** – The product is $5n$; subtracting 4 from it gives $5n - 4$. Writing $4 - 5n$ reverses the subtraction.
10. **B** – Add the coefficients of the same group: $2 + 7 = 9$. The group stays unchanged.

Remember

- Terms are separated by $+$ and $-$ signs, and each term keeps its own sign.
- A coefficient multiplies a variable; a constant has no variable.
- Like terms have the same variable part and can be combined by adding coefficients.
- A grouped expression such as $(x + 3)$ can be treated as one factor.
- In a model, a coefficient is often a rate and a constant is a starting amount.