

Equivalent Algebraic Expressions: math test, Grade 7

– download the PDF

Suggested time: 45 minutes. Out of 20 points. Calculator allowed only when the problem says so.

1 Combine like terms

/ 4 pts

Simplify.

- a. $8x + 5x - 3$
- b. $7a - 4 + 2a + 9$
- c. $6m - 9n - 2m + 5n$
- d. $1.5y + 3 - 0.5y - 1$

2 Expand and simplify

/ 4 pts

Expand and simplify.

- a. $4(x + 6)$
- b. $-2(3y - 5)$
- c. $3(2a + 1) + 4a$
- d. $5(m + 2) - 3(m - 4)$

3 Factor**/ 3 pts**

Factor out the greatest common factor.

- a. $15x + 20$
- b. $12y - 18$
- c. $8a + 12b - 4$

4 Add and subtract**/ 3 pts**

Simplify.

- a. $(6x - 5) + (3x + 9)$
- b. $(7y + 2) - (4y - 6)$
- c. $(2a + 5) - (5a - 1)$

5 Are they equivalent?**/ 3 pts**

- a. Simplify $3(x + 2) - x$ and decide whether it is equivalent to $2x + 6$.
- b. Evaluate both expressions at $x = 4$.

6 Rectangular garden**/ 3 pts**

A garden is 6 feet wide and $x + 4$ feet long.

- a. Write the area as an expanded expression.
- b. Write the perimeter in simplest form.
- c. Find the area and perimeter when $x = 9$.



Test yourself: quick challenge for Grade 7

[Change level](#)

Level : **Grade 7**

6 random questions, instant feedback.



Start the challenge



Keep exploring with Zyro



Test solutions

Equivalent Algebraic Expressions: math test solutions, Grade 7



Math lessons

Equivalent Algebraic Expressions: math lesson, Grade 7



Math practice



Test solutions

Equivalent Algebraic Expressions: math practice, Grade 7

Solving Two-Step Equations: math test solutions, Grade 7

🏆 **Test solutions**

Solving Inequalities: math test solutions, Grade 7

📖 **Math lessons**

Solving Two-Step Equations: math lesson, Grade 7

Zyro takes you to our partner sites

Blast off to other planets of knowledge and their apps.

Lift off