

Checking for Errors

Your friend was struggling in her math class and asked you to check her homework for her. Your job is to look over her assignment and check for errors. If you find an error, highlight it and explain what was wrong. Then rework the problem correctly, showing all of your work so your friend can understand what you did.

1. $3 + 6 \cdot 8 - 2$ $9 \cdot 8 - 2$ $72 - 2$ 70	2. $4 + 3(2 + 1)^2$ $4 + 3 \cdot 3^2$ $4 + 9^2$ $4 + 81$	3. $4(2 + 7) - 4^2$ $4 \cdot 9 - 16$ $36 - 16$ 20	4. $2x - 3 = 9$ $\quad +3 \quad +3$ $\frac{2x}{2} = \frac{12}{2}$ $x = 6$	5. $3x + 7 - 4x + 2 = x - 9$ $\quad +4x \quad +4x$ $7x + 7 + 2 = x - 9$ $7x + 9 = x - 9$ $\quad -x \quad -x$ $6x + 9 = -9$ $\quad -9 \quad -9$ $\frac{6x}{6} = \frac{-18}{6}$ $x = -3$
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Determine whether or not the given statements are true or false. If a statement is false then explain why it is wrong or provide a counterexample.

6. If you live in Portland, then you live in Maine.
7. All rectangles are squares.
8. There is one month with 28 days.
9. All even numbers are divisible by four
10. All ripe apples are red.
11. Our Vice President is Joe Biden.
12. All US states are on the North American Continent.
13. Inductive reasoning goes from the specific to the general.
14. All prime numbers are odd.
15. All books have a binding.
16. Deductive reasoning involves finding patterns.
17. There are villages on every continent of the world.
18. All triangles have exactly three sides.
19. All stop signs are red.
20. All snakes are poisonous.
21. All ants are insects.
22. Everyone can sing well.
23. The product of two odd numbers is odd.