



Puzzle Time

What Goes Into The Water Green But Comes Out Blue?

Write the letter of each answer in the box containing the exercise number.

Factor the polynomial.

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|---------------------|---------------------|
| 1. $x^2 + 11x + 28$ | 2. $x^2 - 3x - 54$ |
| 3. $x^2 + 7x - 30$ | 4. $x^2 - 10x + 16$ |
| 5. $x^2 - 3x - 28$ | 6. $x^2 + 13x + 40$ |
| 7. $x^2 - 8x - 48$ | 8. $x^2 - 17x + 72$ |

Solve the equation.

9. $x^2 + 3x + 2 = 0$
10. $x^2 - 6x - 55 = 0$
11. $x^2 + 9x - 36 = 0$
12. $x^2 - 13x + 42 = 0$
13. $x^2 + 11x + 18 = 0$
14. $x^2 - x - 6 = 14$
15. The area of a rectangle is 63 square inches. The area of the rectangle can be represented by $A = x^2 - 16x + 126$. What are the possible values of x ?

Answers

- D. $(x - 12)(x + 4)$
- O. $(x + 4)(x - 7)$
- A. $(x + 8)(x + 5)$
- N. $(x + 7)(x + 4)$
- Y. $(x - 8)(x - 2)$
- A. $(x - 9)(x + 6)$
- R. $(x - 8)(x - 9)$
- O. $(x + 10)(x - 3)$
- G. 7, 9
- D. -2, -1
- L. -4, 5
- F. -9, -2
- C. -5, 11
- A. 6, 7
- O. -12, 3

6		13	8	11	15		5	1		2		10	3	14	7		9	12	4
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