HIGH SCHOOL ACTIVITIES

Crossfactor Puzzle

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Everyone likes crossword puzzles, so why not give your students a crossfactor puzzle? While covering factoring in first-year algebra, my students came to a point where they understood the concepts but needed some practice. To make their practice less painful, I gave it to them in the form of a crossword puzzle. The students enjoyed it and completed the needed drill.

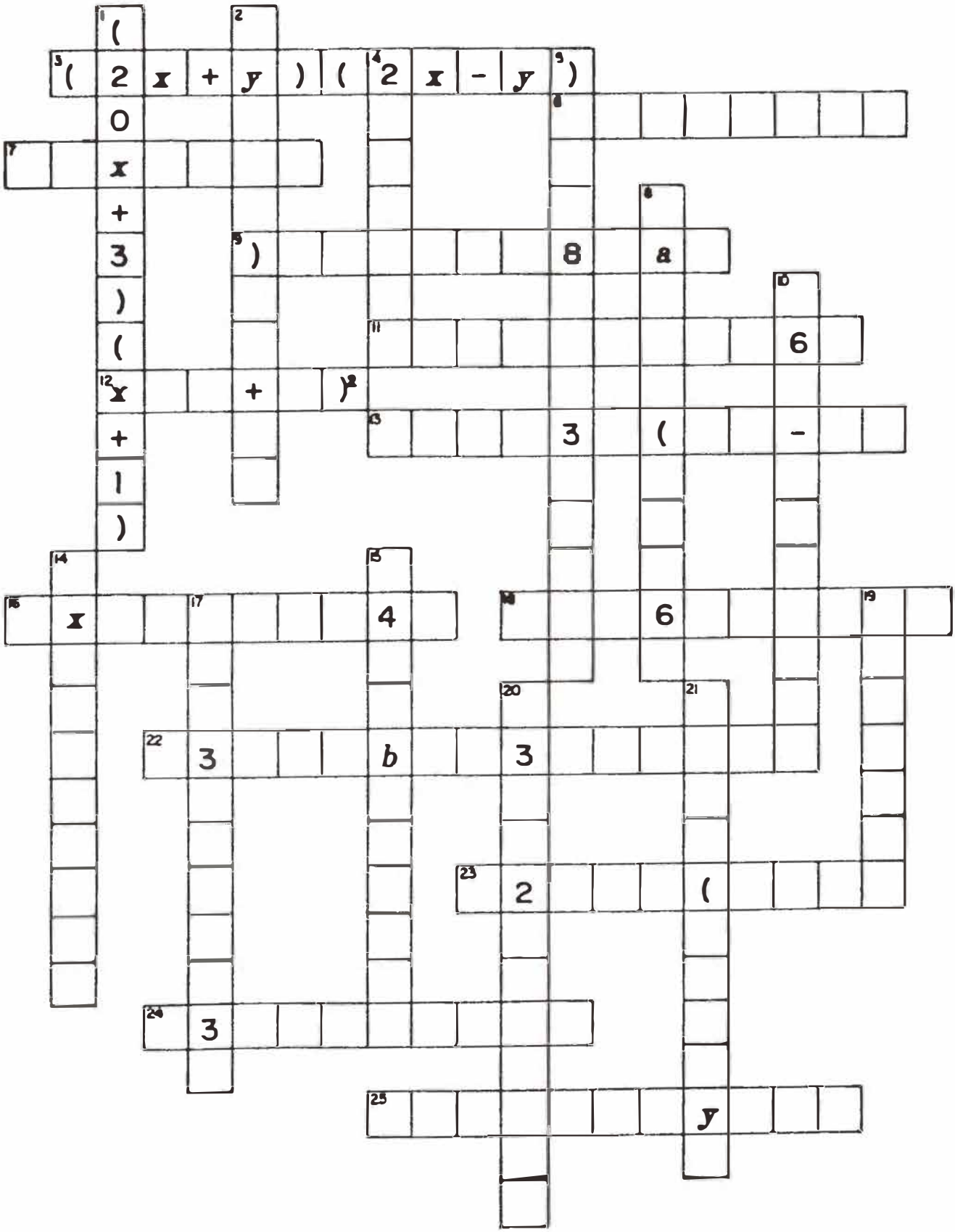
With a little imagination, the crossword format could be used with many other topics, including addition, subtraction, multiplication and division of polynomials, and for review as well as drill.

DIRECTIONS

Factor the following polynomials and write their factors in the puzzle. Numbers 1 and 3 are completed to help you get started. There are also clues scattered throughout the puzzle. To simplify the puzzle, a parenthesis can be used in a given square to indicate both a left and a right parenthesis.

1. $20x^2 + 23x + 3$
2. $y^2 + 3yz + 2z^2$
3. $4x^2 - y^2$
4. $2x^2 + 4x$
5. $9x^2 - 64y^2$
6. $9yx - 15y$
7. $2x + 44$
8. $5a^2 + 31a + 30$
9. $2a^2 + 17a + 8$
10. $6y^2 + 19y - 20$
11. $5x^2 + 21x + 18$
12. $x^3 + 6x^2 + 9x$
13. $12a^2 - 25a + 12$
14. $x^2 - 16$
15. $12 - 13b + 3b^2$
16. $x^2 - 16$
17. $2y^2 + 9y + 9$
18. $y^2 - 36$
19. $24y + 18$
20. $18x^2 + 9x - 2$
21. $40x^2y - 60xy^2$
22. $9a^2 - 24ab - 20b^2$
23. $6 + 5x + x^2$
24. $18 + 9y + y^2$
25. $7y^2 + 37y - 30$

Answer on page 27.


(
(2x + y)(2x - y)
0x + 3)(x + 1)
8a
6
x + 4
6
3
3b
3
2(
3
y