

FACTORING WITH GROUPING

Factor out the greatest common factor.

1. $8x - 4y$

2. $3x^2 + 6x$

3. $30xy^2 - 25x^2y$

Factor by grouping

4. $xy + 2y + 6x + 12$

5. $ac - ad - 2bd + 2bc$

6. $2ax + 6x - 5a - 15$

7. $2x^2 - x - 6x + 3$

Factor the following completely.

8. $x^2 + 7x + 10$

9. $x^2 + 7x - 18$

10. $x^2 - 9x + 20$

11. $x^2 + 8x - 48$

12. $2x^2 - 8x - 10$

13. $4x^2 - 12x + 9$

14. $x^2 - 4$

15. $x^2 + 100$

16. $25x^2 - 9y^2$

17. $2x^2 - 7x + 6$

18. $4x^2 + 13x + 3$

19. $3x^2 - 4x - 7$

20. $4x^2 + 2x - 6$

FACTORIZING WITH GROUPING

Answers

1. $4(2x - y)$
2. $3x(x + 2)$
3. $5xy(6y - 5x)$
4. $(x + 2)(y + 6)$
5. $(a + 2b)(c - d)$
6. $(a + 3)(2x - 5)$
7. $(x - 3)(2x - 1)$
8. $(x + 2)(x + 5)$
9. $(x + 9)(x - 2)$
10. $(x - 4)(x - 5)$
11. $(x + 12)(x - 4)$
12. $2(x + 1)(x - 5)$
13. $(2x - 3)^2$
14. $(x + 2)(x - 2)$
15. Prime
16. $(5x - 3y)(5x + 3y)$
17. $(2x - 3)(x - 2)$
18. $(4x + 1)(x + 3)$
19. $(3x - 7)(x + 1)$
20. $2(2x + 3)(x - 1)$