

Precalculus Algebra Review Worksheet #1 Factoring Selected Solutions

4. $15x^3 - 35x^2 = \underline{5x^2(3x - 7)}$

9. $x^2 - 9x + 20 = \underline{(x - 4)(x - 5)}$

12. $x^2 - 3x - 4 = \underline{(x - 4)(x + 1)}$

16. $5x^4 - 25x^3 + 20x^2 = \underline{5x^2(x - 1)(x - 4)}$
 $5x^2(x^2 - 5x + 4)$

21. $7x^2 - 11x - 6 = \underline{(7x + 3)(x - 2)}$

24. $10x^2 - 21x + 9 = \underline{(5x - 3)(2x - 3)}$

30. $-60x^4 + 5x^3 + 30x^2 = \underline{-5x^2(4x - 3)(3x + 2)}$
 $-5x^2(12x^2 - x - 6)$

34. $6x^2 - 24x - 126 = \underline{6(x - 7)(x + 3)}$
 $6(x^2 - 4x - 21)$

38. $9x^2 - 30x - 24 = \underline{3(3x + 2)(x - 4)}$
 $3(3x^2 - 10x - 8)$

40. $24x^2 + 10x - 25 = \underline{(4x + 5)(6x - 5)}$

44. $121x^2 - 81 = \underline{(11x + 9)(11x - 9)}$

45. $x^4 - 16 = \underline{(x^2 + 4)(x + 2)(x - 2)}$
 $(x^2 + 4)(x^2 - 4)$