Partial Fraction Decomposition Worksheet Name_____

Find the partial fraction decomposition for each rational expression.

1. $\frac{1}{x^2-1}$

2. $\frac{1}{x^2+x}$

3. $\frac{3}{x^2-3x}$

4. $\frac{1}{2x^2+x}$

5. $\frac{5}{x^2+x-6}$

6. $\frac{3}{x^2+x-2}$

7. $\frac{x+1}{x^2+4x+3}$

8. $\frac{x^2+12x+12}{x^3-4x}$

9. $\dfrac{3x}{(x-3)^2}$

10. $\dfrac{x}{(x-1)(x^2+x+1)}$

11. $\dfrac{x+6}{x^3-3x^2-4x+12}$

12. $\dfrac{x^2+5}{(x+1)(x^2-2x+3)}$

13. $\dfrac{x^2-4x+7}{(x+1)(x^2-2x+3)}$

14. $\dfrac{x^2-x}{x^2+x+1}$

15. $\dfrac{2x^3-x^2+x+5}{x^2+3x+2}$

16. $\dfrac{x^3+2x^2-x+1}{x^2+3x-4}$