NAME: _____   SCORE: _____

Synthetic Polynomial Division Worksheet 2

INSTRUCTIONS: Find the quotient using Synthetic Polynomial Division. Use the back of the paper to show your work.

1. $(x^3 + 3x^2 - 18x + 2) \div (x + 2)$ $x^2 + x - 20 + \dfrac{42}{x+2}$

2		1	3	-18	2
			-2	-2	40
		1	1	-20	42

2. $(x^4 + 3x^3 + 2x^2 - 3x + 5) \div (x + 2)$

3. $(x^3 - 2x^2 + 3x - 4) \div (x - 2)$

4. $(4x^4 + 6x^3 - 20x^2 + 90x + 40) \div (x + 4)$

5. $(x^3 - 2x^2 + x - 3) \div (x - 3)$

6. $(2x^4 + 9x^3 - 2x^2 + 10x + 20) \div (x + 5)$

7. $(x^4 + 2x^3 + x^2 + 2x + 1) \div (x + 1)$

8. $(3x^4 - 25x^3 + 25x^2 + 20x + 7) \div (x - 7)$

9. $(x^4 + 6x^3 + 8x^2 + 2x + 10) \div (x + 3)$

10. $(2x^4 - 11x^3 + 6x^2 - 7x + 3) \div (x - 5)$

11. $(2x^4 - 14x^3 + 2x^2 + 50x + 30) \div (x - 6)$

12. $(3x^4 - 9x^3 - 8x^2 - 6x + 4) \div (x - 4)$