Math 3 – Polynomial Long Division Name _____ A# _____

Divide each polynomial. Determine whether the divisor is a factor of the polynomial.

1. $(x^2 - 10x - 11) \div (x + 1)$

2. $(x^2 - 25) \div (x - 5)$

3. $(2x^2 - 17x - 38) \div (2x + 3)$

4. $(42x^2 - 33) \div (7x + 7)$

5. $(3x^5 + 20x^4 + 9x^3 - 92x^2 - 60x) \div (3x + 2)$

6. $(x^3 - 30x - 18 - 4x^2) \div (3 + x)$

7. $(-5x^2 + x^3 + 8x + 4) \div (-1 + x)$

8. $(x^4 - 3x^3 + 6x^2 - 12x + 8) \div (x - 1)$