Algebra 2 S1 Name: _____ Block: _____

# Topic: Polynomials Solving Polynomials Review

| | |
|---|---|
| 4 | In addition a 3.0, demonstrate in-depth inferences & applications that go beyond the learning goal. |
| 3 | ☐ Solve quadratic equations in one variable by factoring<br>☐ Determine if a given binomial is a factor of a polynomial; if so, completely factor the polynomial (#4) |
| 2 | ☐ *Recognize or recall specific vocabulary such as: monic, roots, end behavior*<br>☐ Factoring – showing expressions in different representations<br>▪ Non-monic<br>▪ Factor by grouping<br>☐ Find the remainder using<br>▪ The Remainder Theorem (#1)<br>▪ Divide polynomials (#1, 2) |
| 1 | Student performance reflects insufficient progress towards foundational skills and knowledge. |

**Factor and solve each polynomial, if possible.**

1. $2x^2 - 10x$
2. $x^3 - 3x^2$
3. $13x^2 - 169x$
4. $-15x + 15x^3$
5. $23x^4 - 92x^2$
6. $4x^3 - 8x^2 + 4x^4$
7. $3x^3 - 3x^2 + 6x$
8. $18x^2 - 2$
9. $4n^2 - 49$
10. $72k^2 - 2$
11. $9x^2 - 16y^2$
12. $36x^4 - 25x^2$
13. $b^2 + 8b + 7$
14. $n^2 - 11n + 10$
15. $3n^3 - 15n^2 + 18n$
16. $4n^3 + 24n^2 + 32n$
17. $2a^2 - 2a - 180$
18. $p^2 + 11p + 10$
19. $2x^2 + 5x + 2$
20. $7x^2 - 29x + 4$
21. $10x^2 - 7x - 3$
22. $5x^2 + 13x + 6$
23. $2x^2 + 5x + 3$
24. $5x^2 + 29x - 6$
25. $14x^2 + 18x + 4$
26. $15x^2 - 50x + 15$
27. $8x^3 - 64x^2 + x - 8$
28. $6x^3 - 16x^2 + 21x - 56$
29. $96x^3 - 84x^2 + 112x - 98$
30. $28x^3 + 16x^2 - 21x - 12$