

Name: _____

Algebra 2

WS – Topics from Poly Unit 2

Review of material needed for unit 3B.
Show all work on a separate piece of
paper. Write all final answers on this form.

Divide using Synthetic division.

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

Ans: _____

2. $(4x^3 + x^2 - 15) \div (x - 1)$

Ans: _____

3. $(x^3 + 8x^2 + 13x - 10) \div (x + 5)$

Ans: _____

4. $(9x^3 - 33x^2 + 19x) \div (3x - 1)$

Ans: _____

5. $(6x^4 + 15x^3 + 6) \div (x + 3)$

Ans: _____

6. $(4x + 2x^3 + 7x^2 - 1) \div (x + 1)$

Ans: _____

Factor completely and then solve.

7. $8x^3 = 125$

FF: _____

Sol: _____

8. $2x^4 + x^2 = 10$

FF: _____

Sol: _____

9. $9x^2 - 36x - 27 = 0$

FF: _____

Sol: _____

10. $-11x^4 + 396 = 0$

FF: _____

Sol: _____

11. $2x^3 + 24x^2 + 16x + 192 = 0$

FF: _____

Sol: _____

12. $4x^4 + 64x^3 + 128x^2 = 0$

FF: _____

Sol: _____

TURN OVER! There is more!! 😊

Name: _____

Algebra 2

WS – Topics from Poly Unit 2

Review of material needed for unit 3B.
Show all work on a separate piece of
paper. Write all final answers on this form.

Divide using Synthetic division.

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

Ans: _____

2. $(4x^3 + x^2 - 15) \div (x - 1)$

Ans: _____

3. $(x^3 + 8x^2 + 13x - 10) \div (x + 5)$

Ans: _____

4. $(9x^3 - 33x^2 + 19x) \div (3x - 1)$

Ans: _____

5. $(6x^4 + 15x^3 + 6) \div (x + 3)$

Ans: _____

6. $(4x + 2x^3 + 7x^2 - 1) \div (x + 1)$

Ans: _____

Factor completely and then solve.

7. $8x^3 = 125$

FF: _____

Sol: _____

8. $2x^4 + x^2 = 10$

FF: _____

Sol: _____

9. $9x^2 - 36x - 27 = 0$

FF: _____

Sol: _____

10. $-11x^4 + 396 = 0$

FF: _____

Sol: _____

11. $2x^3 + 24x^2 + 16x + 192 = 0$

FF: _____

Sol: _____

12. $4x^4 + 64x^3 + 128x^2 = 0$

FF: _____

Sol: _____

TURN OVER! There is more!! 😊