

CLASS AGENDA

- ◉ Synthetic Division
- ◉ Small Group Practice
- ◉ Break
- ◉ Small Group Practice
- ◉ Study Island
- ◉ Closure

SYNTHETIC DIVISION

- ⊙ $P(x) = 2x^4 - 15x^2 - 10x + 5$
- ⊙ *Evaluate: $x - 3$*

SYNTHETIC DIVISION

⊙ $P(x) = x^3 + 5x^2 + 5x - 2$

⊙ *Evaluate $x + 2$*

ADDITIONAL ROOTS

- ◉ $P(x) = x^3 + 5x^2 + 5x - 2$
- ◉ *Evaluate* $x + 2$

- ◉ Take what's left
- ◉ $1 \quad 3 \quad -1$

- ◉ Write as a Polynomial Function
- ◉ $x^2 + 3x - 1$

- ◉ Factor:

PRACTICE

◉ Find the remainder when $x^5 - 2x^3 + x^2 - 4$ is divided by:

1. $x - 1$

2. $x + 1$

3. $x - 2$

4. $x + 1$

PRACTICE

⦿ Find the remainder when $x^3 - 3x^2 + 5$ is divided by:

1. $x - 2$

2. $x + 2$

3. $x - 3$

4. $x + 3$

PRACTICE

- ⊙ Is $x+1$ a factor of $P(x) = x^3 + 3x^2 + x - 1$?
- ⊙ If so, are there others and what are they?

BREAK

SMALL GROUP PRACTICE

- Complete the worksheet

CLOSURE

CLOSURE

- ◉ How can you find the roots of a polynomial function?