

**Monday:** Grugdeball Review

**Tuesday:** Review Game (TBD)

**Wednesday:** Summative Assessment

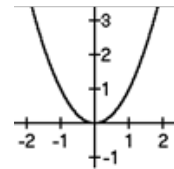
Turn in Unit 1, Unit 2 and Summative Review

~~~~~FALL BREAK~~~~~

**Tuesday and Wednesday:** Corrections for Summative Assessment and Formative 3 Retakes

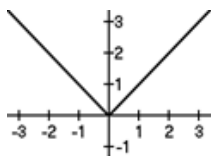
**Wednesday:** End of Term 1

Write the parent function:



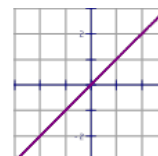
$x^2$

Write the parent function:



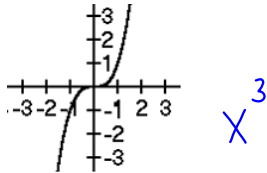
$|x|$

Write the parent function:



$x$

Write the parent function:



List the transformations:

$$f(x) = (x-3)^2 - 4$$

Shift Right 3

Shift Down 4

List the transformations:

$$f(x) = -|x+3|$$

V. Flip

Shift Left 3

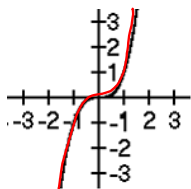
List the transformations:

$$f(x) = 4\sqrt{x+2}$$

V. Stretch by 4

Shift Up 2

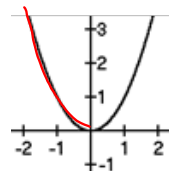
State where the function is **increasing**



x-values

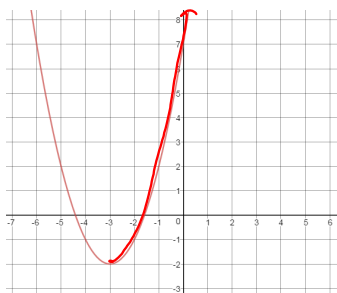
$(-\infty, \infty)$

State where the function is **decreasing**



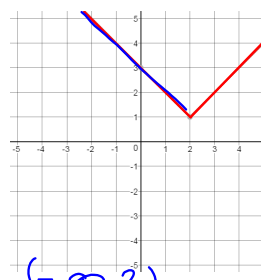
$(-\infty, 0)$

State where the function is **increasing**



x-values  
 $(-3, \infty)$

State where the function is **decreasing**



$(-\infty, 2)$

State the **x-intercept**

$$y=0 \quad g(x) = \sqrt{x+1} - 2$$

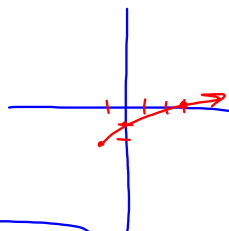
$$0 = \sqrt{x+1} - 2$$

$$2 = \sqrt{x+1}$$

$$4 = x+1$$

$$3 = x$$

$(3, 0)$



State the **y-intercept**

$$h(x) = 2(x-3)^2 + 1$$

$$2(0-3)^2 + 1$$

$$2(9) + 1$$

$$18 + 1$$

$$19$$

$(0, 19)$

Perform the operation and write in standard form

$$(82x^8 + 21x^2 - 6) + (18x + 7x^8 - 42x^2 + 3)$$

$$89x^8 - 21x^2 + 18x - 3$$

Perform the operation and write in standard form

$$(-2x + 23x^5 + 11) + (5 + 9x^3 - x)$$

$$23x^5 + 9x^3 - 3x + 6$$

Perform the operation and write in standard form

$$(10x^2 - x + 4) - (5x + 7) + (6x - 11)$$

$$10x^2 - 14$$

Perform the operation and write in standard form

$$(x - 2)(x^2 - 3x + 4)$$

Perform the operation and write in standard form

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

Perform the operation and write in standard form

$$(x^4 - 7x^2 + 3x - 10) \div (x - 3)$$

Factor

$$x^2 + 5x - 14$$

$$(x+7)(x-2)$$

Factor

$$3x^2 - 10x - 8$$

Factor

$$2x^2 + x - 6$$

Factor

$$2x^2 - 18$$

Factor

$$2x^3 - 6x^2 - 8x + 24$$

Factor

$$8x^3 - 125$$

Factor

$$x^3 + 64$$

Find the zeros and the multiplicities:

$$f(x) = (x-5)^2(x+3)^5(x+7)$$

Find the zeros and the multiplicities:

$$f(x) = -x^3(x+4)^4$$

Determine the End Behavior

$$f(x) = -3x^4 + 2x^3 + 6x - 4$$

Determine the End Behavior

$$f(x) = x^3 + 2x^2 - 7x - 13$$

Determine the End Behavior

$$f(x) = (x-1)^2(x+2)(x+4)$$



Determine the End Behavior

$$f(x) = -x^3(x+4)^4$$

Determine the End Behavior

$$f(x) = -x(x+2)^2(x-5)^2(x-7)$$

Determine the **zeros** and **type of intersection** for each zero.

$$f(x) = -x(x+2)^2(x-5)^2(x-7)$$

Determine the **zeros** and **type of intersection** for each zero.

$$f(x) = (x-5)^2(x+3)^5(x+7)$$

Determine the **zeros** and **type of intersection** for each zero.

$$f(x) = -x^3(x+4)^4$$

Determine the **zeros** and **type of intersection** for each zero.

$$f(x) = (x-1)^2(x+2)(x+4)$$

Solve the inequality:

$$-(x+1)(x-3)^2 \geq 0$$

Solve the inequality:

$$(x-2)(x-5)^3(x+3) < 0$$