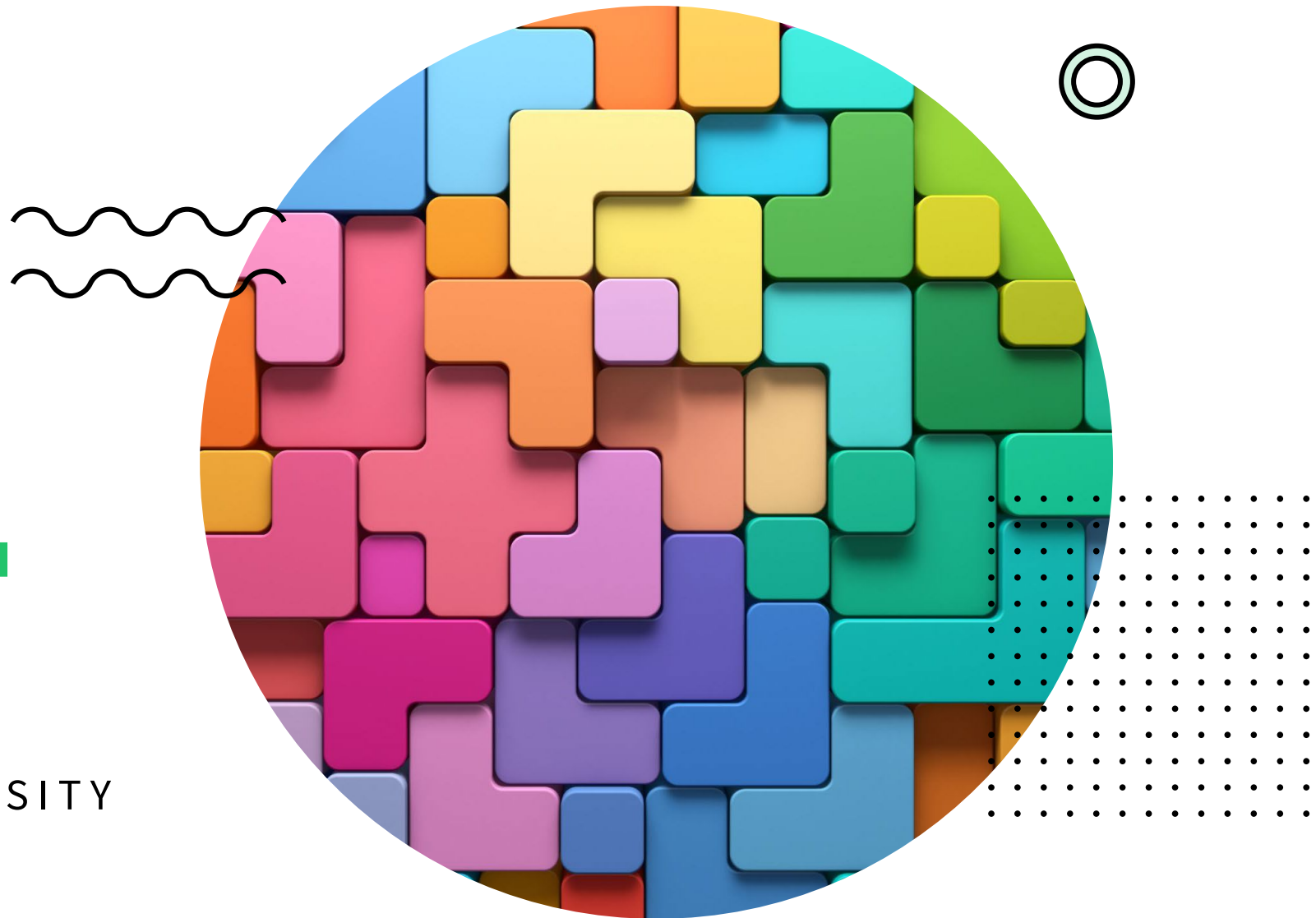
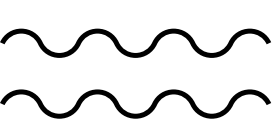


APPROACHING
COLLEGE
ALGEBRA WITH
PRE-REQ

JAYME GOETZ
MATH INSTRUCTOR
FORT HAYS STATE UNIVERSITY





Basics of 105



College Algebra
with Review



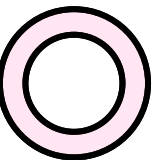
5-hour course



Small class
sizes



Moves at a
slower pace





Guided Practices

MATH 110 – College Algebra
5.1C Solving Equations and Inequalities

Solve the equation:	Sketch it:	Solve the inequality:
1. $2x^2 - 8x = 24$		$2x^2 - 8x \geq 24$
2. $-0.5(x-6)^2 + 8 = 0$		$-0.5(x-6)^2 + 8 > 0$
3. $2 3x+1 - 1 = 9$		$2 3x+1 - 1 > 9$
4. $ x+8 = -7$		$ x+8 > -7$
5. $x^2 - 10x + 34 = 0$		$x^2 - 10x + 34 \leq 0$

College Algebra Section 4.4
Solving Equations and Inequalities

Solve the equation:	Sketch it:	Solve the inequality:
1. $2x^2 - 8x = 24$ $2x^2 - 8x - 24 = 0$ $2(x^2 - 4x - 12) = 0$ $2(x+2)(x-6) = 0$ $x = -2 \quad x = 6$		$2x^2 - 8x \geq 24$ $2x^2 - 8x - 24 \geq 0$ $x \leq -2 \quad x \geq 6$ $(-\infty, -2] \cup [6, \infty)$ <i>above the x-axis or touching it</i>
2. $-0.5(x-6)^2 + 8 = 0$ $-0.5(x-6)^2 = -8$ $(x-6)^2 = 16$ $x-6 = \pm 4$ $x = 6 \pm 4$ $x = 10 \quad x = 2$		$-0.5(x-6)^2 + 8 > 0$ $2 < x < 10$ $(2, 10)$ <i>above the x-axis</i>
3. $2 3x+1 - 1 = 9$ $2 3x+1 = 10$ $ 3x+1 = 5$ $3x+1 = 5 \quad 3x+1 = -5$ $3x = 4 \quad 3x = -6$ $x = \frac{4}{3} \quad x = -2$		$2 3x+1 - 1 > 9$ $2 3x+1 - 10 > 0$ $ 3x+1 > 5$ $x < -2 \quad x > \frac{4}{3}$ $(-\infty, -2) \cup (\frac{4}{3}, \infty)$
4. $ x+8 = -7$ No Solution		$ x+8 = -7$ or $ x+8 > -7$ $(-\infty, \infty)$
5. $x^2 - 10x + 34 = 0$ $x^2 - 10x + 25 = -34 + 25$ $(x-5)^2 = -9$ $x-5 = \pm 3i$ $x = 5 \pm 3i$		$x^2 - 10x + 34 \leq 0$ \emptyset <i>below the x-axis or touching it</i>





Desmos Activities

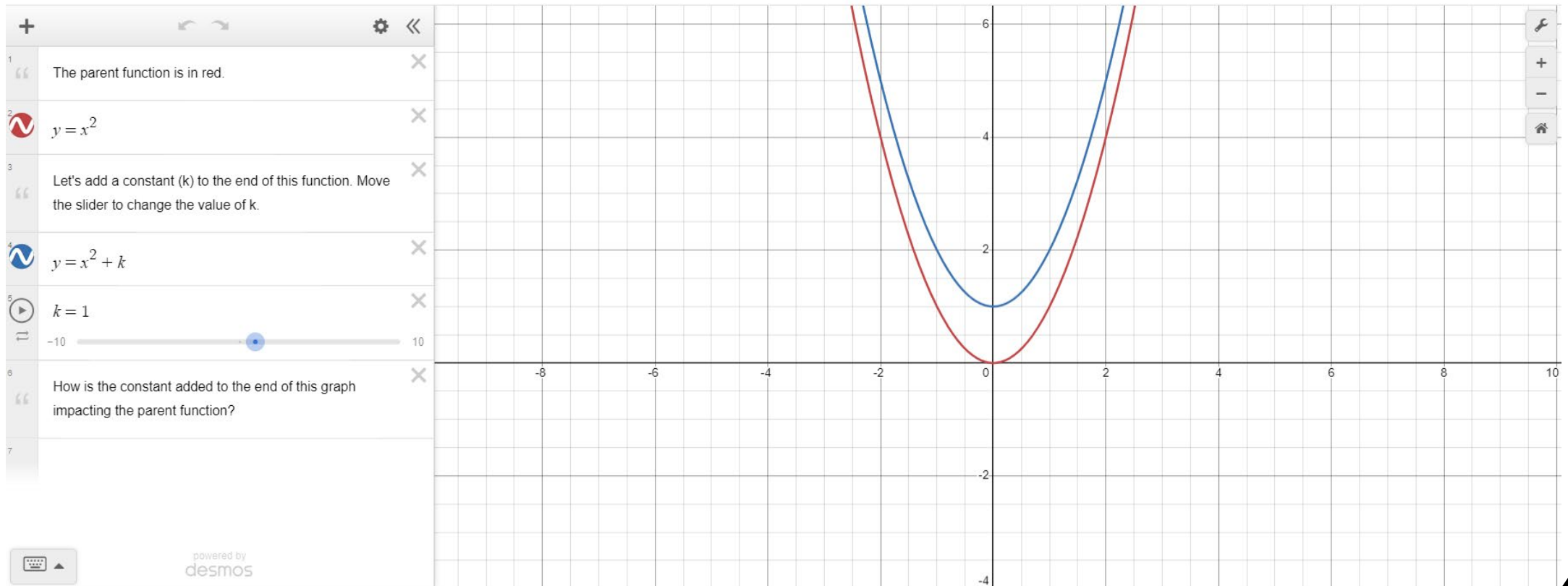
Student Screen Preview

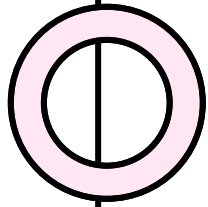


2 of 20

Next >

What happens when we take a parent function...and move it?





Pacing



Keep on track with 3-hour courses



2-3 lessons per week



Make decisions based on your students' needs



2 review days



**jlgoeetz3@
fhsu.edu**

DON'T HESITATE TO
CONTACT ME WITH
QUESTIONS!