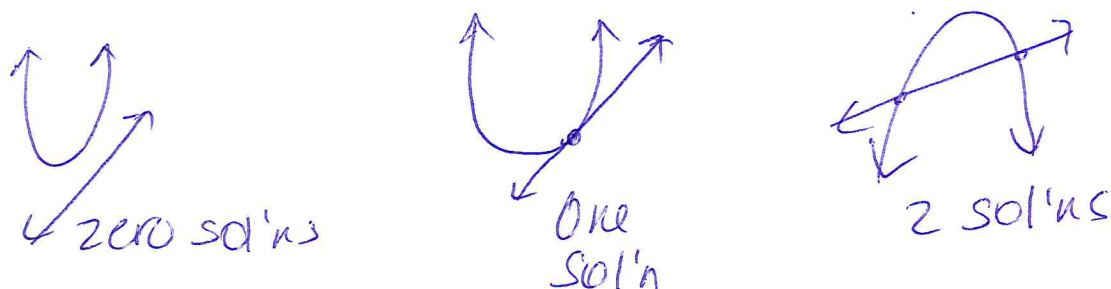
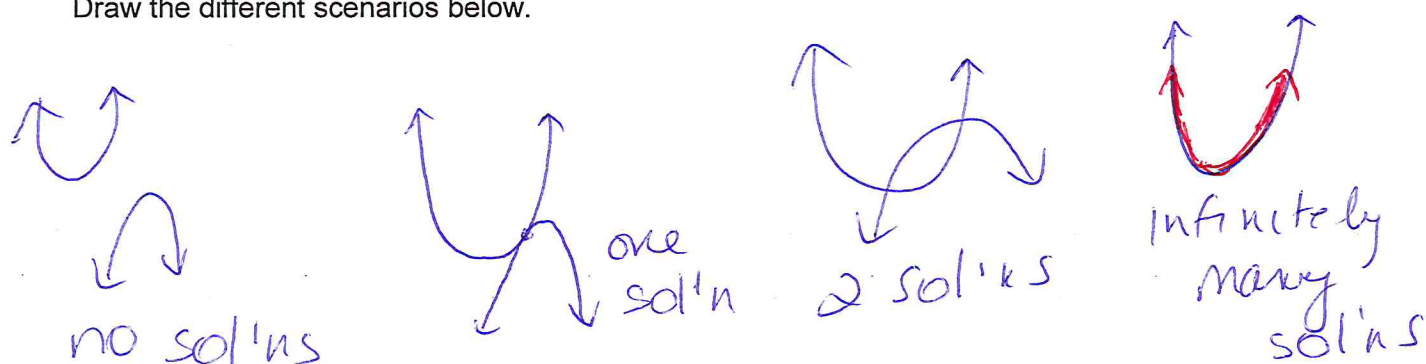


Algebra 2
Chapter 5 / Quadratics Unit Review

11. When you solve a system of equations that has one linear and one quadratic equation, how many solutions are possible? Draw the different scenarios below.



12. When you solve a system of 2 quadratic equations, how many solutions are possible? Draw the different scenarios below.



13. When we graph a quadratic by hand, the gold standard is plotting 5 points.

What is the only point on a parabola that does NOT have a symmetrical partner? vertex

How do you get the remaining 4 points to graph? Use "slope" (a/1) from the vertex to get 2 more points. Then find the y-int + its partner for the 4th + 5th points.

14. In this unit, we learned that we can actually find the square root of a negative number.

What is the name of the type of numbers this introduces? complex/imaginary #'s

What is the standard form of this type of number? $a + bi$

What is the base unit for this new set of numbers? i What is its definition? $i = \sqrt{-1}$

We can raise this unit to any whole number power and then simplify, but there are only

4 answers we could possibly get. What are they? $i, -i, 1, -1$

$$i^{R0} = 1 \quad i^{R1} = i \quad i^{R2} = -1 \quad i^{R3} = -i$$

$R = \text{remainder after } \div \text{ by } 4$