**E QUADRATIC VIDEO TRANSCRIPT**

I: Ok, so can you solve this problem? (Interviewer hands her the problem) (Student takes marker and starts writing) So talk through what you’re doing if you would please.

S: So factors of c that add up to b, ‘cause it’s a perfect square trinomial so you could do (pause) negative 2 times negative 2 will equal 4, will equal negative 4 when you add them or subtract them.

I: So you’re doing that so you could do what?

S: To factor, like factoring it out.

I: Oh Ok.

S: X-2 and X-2 will equal zero. So you’d have (X-2)^2 equals 0. (Pause) And then (pause) take (pause) the square root of both sides (skeptical). (X-2) equals 0. Add two. X equals 0. (Pause) (Looks at interviewer)

I: You got X equals 0?

S: Or two (fixes mistake)

I: Ok… Could you solve that another way?

S: (pause) You could use like the quadratic formula, you could do (long pause). Umm… it goes factoring, I don’t remember.

I: Ok. How about this one? [task 2]

S: So using the quadratic formula for this one. So it’ll be –b plus or minus the square root of b squared minus 4ac over 2a equals X. So, 2±Sq.Rt.(4-12) all over 2, so then your solutions would be 2+Sq.Rt.(-8) all over 2, 2-Sq.Rt.(-8) over 2, so then you could (pause), and then it’ll just be (pause) Sq.Rt.(-8) or –Sq.Rt.(-8). You can cancel the 2s (cancels 2s in the numerator and denominator)

I: Ok and what do you know about Sq.Rt. of -8?

S: Oh you can’t have it ‘cause you can’t take a negative square root (pause), so you’d get (pause), so you’d just have one (pause) or zero (skeptical) (longer pause)

I: So what do you think your solutions are?

S: Wait. It should be zero?! (Questioning)

I: What do you mean by it should be zero?

S: Well ‘cause you can’t, it’d be like a no solution?! (Turns to interviewer)

I: Oh so no solution. Ok.

S: Yeah ‘cause you can’t have a negative square root.

I: So grab your other problem that you did (student grabs both problems), when you look at those two what would the graph of this look like (interviewer points to first problem)?

S: (pause) It would be both (pause) lines intersecting at X=2. Like at 2.

I: What kind of graph is that (interviewer points to first problem) X^2-4X+4?

S: Quadratic? (pause)

I: And what shape is that?

S: Like a straight line (questioning) (raises voice afterwards) or the curve (draws the graph of Sq.Rt.(X)) (pause) like on the graph.

I: Ok (long pause) Ok, great. Thank you.

S: Yeah.