

NAME: \_\_\_\_\_

## Volleyball and Parabolas

Two volleyball players are passing a volleyball back and forth over a net which is placed on the y axis as shown below. The volleyball travels a parabolic path.

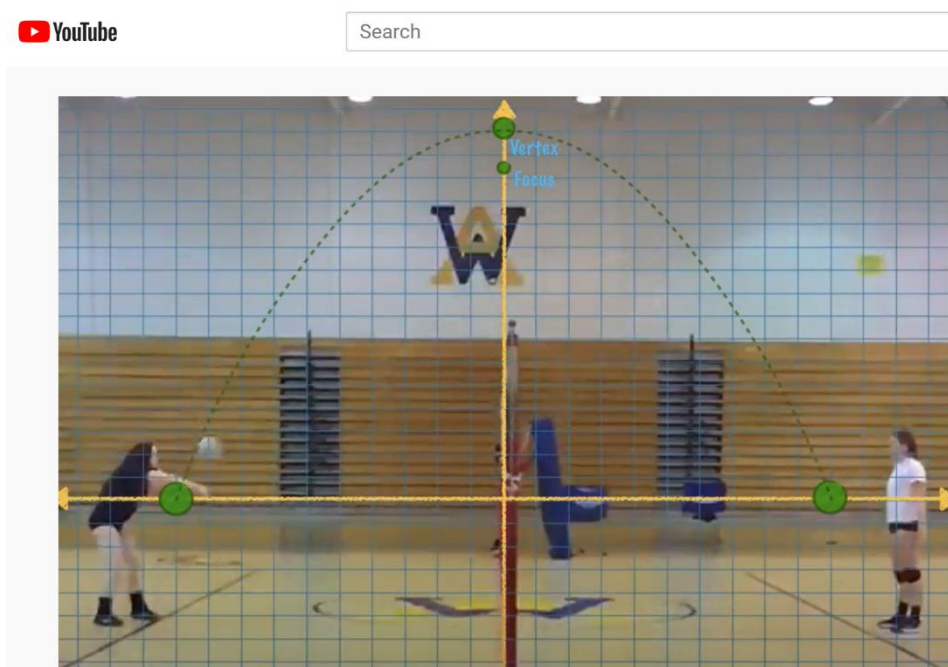


Image Source: Boitnott, Abby, "Parabola Volleyball Pass" (2016). <https://youtu.be/mtAaZfbT9KY>

- What is the vertex of the parabola?
- What are the zeros of this graph (write as ordered pairs)?
- Determine the quadratic function representing the parabolic path of the ball.
- Check your function by graphing using Desmos at: <https://www.desmos.com/calculator/aw7arloafp>