

## Math Matters

### Video Evaluation: Applications of Trig Functions

Find 3 different videos that meet the following criteria:

- Each discusses a **different** type of real world application of trig functions (science, construction, navigation, circular motion, harmonic motion, forces, surveying, video games, animation, space travel, crime scene investigation, etc.)
- Uses at least 2 different solving methods. Examples: Right triangle trig, arc length, area of sector, linear & angular velocity, sinusoidal motion, law of sines/cosines, trig identities, trig equations, complex numbers (Example: Cannot be 3 right triangle problems)
- Videos must include the mathematical method for solving the problem
- May be student or teacher-created

Tip: A Google Video Search may sometimes be more helpful in finding academic topics than YouTube.

Answer the following questions about the video **in complete sentences** on a **separate** sheet of paper.

For **EACH** of the **three** videos, provide the following information:

1. List the name of the video, creator of the video, and the complete URL for the video. Mrs. Meyer must be able to find the video using this URL.
2. **Describe** the real world application (not just list the name) and **WHY** it is important.
3. **Describe** the trigonometry used to solve it.
4. Is it a topic you have studied in a math class?

**If YES,** do **ONE** of the following:

- (i) Describe how the discussion of the topic in the video was different than what you have studied **OR**
- (ii) Describe what the video should have included about the topic if the video did not do a thorough job.

**If NO,** answer **ONE** of the following:

- (i) Were you surprised this topic had a connection to trigonometry? **EXPLAIN.**
  - (ii) What else would you like to know about this topic?
5. (a) On a scale of 1 (low) to 10 (high), rate the quality of the visual presentation of this video. **Explain your rating.**
  - (b) On a scale of 1 (low) to 10 (high), rate the quality of the mathematics described in the video. **Explain your rating.**
  - (c) If you were to recreate this video, describe at least **TWO** things you would do to improve it.