

Name \_\_\_\_\_

## Triangles in Action: Trigonometry's Real-World Wonders

### Open-Ended Response Answer Key

1. Trigonometry might be applied in architecture for designing structures with specific angles and dimensions, such as roofs and arches.
2. Trigonometry could be useful in surveying land by calculating distances and angles between various points, aiding in mapmaking and land development.
3. Understanding trigonometry might be crucial for ensuring safety in scenarios such as designing amusement park rides, where precise calculations are needed to prevent accidents.
4. Advances in trigonometry could impact future technologies by enabling more accurate navigation systems, improved engineering designs, and innovative applications in fields such as robotics and space exploration.

