

## Constructing Tangent Lines

### Today's Standard

HSG.C.A4 - (+) Construct a tangent line from a point outside a given circle to the circle.

### Real-World Applications for this Standard

Designing circular gardens with pathways; Engineering wheel and axle systems; Creating artwork involving circles and tangents; Navigation and plotting courses in aviation

### Today I Learned

Today, we learned how to draw a line that touches a circle at just one point from a spot outside the circle. This special line is called a tangent.

### Common Stumbling Blocks

Sometimes, kids think that the line touches the circle at more than one point, but it only touches at one spot. Another mistake is thinking any line that touches the circle is a tangent, but that's not true.

### Quiz Me

- What is a tangent line?
- How many points does a tangent line touch on a circle?
- Can a tangent line touch the circle at two points?
- What do you need to draw a tangent line?
- Why is a tangent line special?

### Help Me

A tangent line is a special line that only touches a circle at one point. You can find tangent lines in real life, like when designing wheels or creating paths in gardens.