

### **Solutions**

Algebra II Journal

## Module 5: Probabilities of Compound Events

Fan Appreciation Night, Part 2

This journal belongs to:

#### Module 5: Probabilities of Compound Events

#### Algebra II Journal: Reflection 1

In this lesson, you learned to distinguish between mutually exclusive and mutually inclusive events. You also used the Addition Rule to calculate probabilities. Respond to the following reflection questions and submit to your teacher.

#### How can you determine if events are mutually exclusive or inclusive?

#### Answer:

If two events cannot happen at the same time, they are mutually exclusive (or disjoint events). If two events can occur at the same time, they are mutually inclusive.

# How do you determine the P(A or B) for mutually exclusive events? For mutually inclusive events?

#### Answer:

To calculate probabilities of mutually exclusive events , P(A or B) = P(A) + P(B). Then events are mutually inclusive, you apply the Addition Rule, P(A or B) = P(A) + P(B) - P(A and B).