



## Apply probability methods in solving problems

| Achieved  | Merit  | Excellence  |
|---|--|---|
| Apply probability methods in solving problems.  | Apply probability methods, using <u>relational thinking</u> , in solving problems. | Apply probability methods, using <u>extended abstract thinking</u> , in solving problems. |
| <p><u>Relational Thinking</u> - Involves selecting and carrying out a logical sequence of steps, connecting different concepts or representations, demonstrating understanding of concepts, and relating findings to a context.</p> |  |   |
| <p><u>Extended Abstract Thinking</u> - Involves devising a strategy, identifying relevant concepts, developing logical reasoning, forming generalizations, and communicating mathematical insight.</p>                              |  |   |

### Probability Methods

The methods included in this standard are related to:

- Risk and relative risk
- Normal distribution
- Inverse Normal distribution
- Experimental distributions
- Two-way tables
- Probability trees

### Problems

Situations set in real-life or statistical contexts that provide opportunities to apply knowledge or understanding of probability concepts and methods.

### Key Vocabulary

Students are expected to understand and use terms related to graphical methods, such as:

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Probability        | <input type="checkbox"/> Normal distribution       | <input type="checkbox"/> Two-way table    |
| <input type="checkbox"/> Risk               | <input type="checkbox"/> Experimental distribution | <input type="checkbox"/> Probability tree |
| <input type="checkbox"/> Relative risk      | <input type="checkbox"/> Relative frequency        | <input type="checkbox"/> Likelihood       |
| <input type="checkbox"/> Continuous         | <input type="checkbox"/> Sample space              | <input type="checkbox"/> Discrete         |
| <input type="checkbox"/> Standard deviation |  | <input type="checkbox"/> Mean             |