

## Solutions

---

Each answer shows the steps, then the **result**.

### 2.1

- a program that models a real-world phenomenon

### 2.2

- it is cheaper or safer than a real trial

### 2.3

- it simplifies reality through its assumptions, so it may miss real details

### 3.1 B

### 3.2 B

### 3.3

(a)

- lower cost or less risk than building and testing a real bridge

(b)

- it could model varied loads or weather conditions

(c)

- its simplifying assumptions may leave out real-world factors