Part 5 | Final Exam | 6.005.1x Courseware

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Part 5

Representations

0.0/2.0 points (graded)

Consider an abstract data type Bool. The type has the following operations:

```
true : void \rightarrow Bool false : void \rightarrow Bool and : Bool \times Bool \rightarrow Bool or : Bool \times Bool \rightarrow Bool not : Bool \rightarrow Bool
```

...where the first two operations construct the two values of the type, and last three operations have the usual meanings of logical *and*, logical *or*, and logical *not* on those values.

Which of the following are possible ways that Bool might be implemented, and still be able to satisfy the specs of the operations? Check all that apply.

unanswered

Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

Rep Invariants

```
0.0/3.0 points (graded)
```

```
/** An immutable rational number. */
class RatNum {
    private int a, b;
    ...
}
```

Which of the following are plausible rep invariants for RatNum?

unanswered

Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

Abstract Data Types

0.0/4.0 points (graded)

Which of the following should be known (visible and documented) to the client of an abstract data type? Check all that apply.

unanswered

Which of the following should be known (visible and documented) to the maintainer of an abstract data type? Check all that apply.

unanswered

Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.