

## 20 OOP pillars and declarative — Part 2 — Answers

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### Answers

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Work through these after trying the questions yourself.

**20.1** Encapsulation.

**20.2** Inheritance.

**20.3** The same method call runs different code on different objects.

**20.4** What (not how).

**20.5** Pure functions (no side effects).

**20.6** Shared code is written once in the superclass, and every subclass inherits it. So common behaviour does not have to be copied into each class — the subclasses just add or change what is different.

**20.7** It states *what* result is wanted — the names of students with grade 'A' — and leaves the database to decide *how* to find them. An imperative version would have to write the loop and the test step by step.