Learning to Program with Haiku

Unit 3 Review

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Lesson 10

1. What do default values for function parameters enable you to do?
2. What advantages do references have over pointers?
3. How is a reference declared?
4. What is the difference between passing a parameter by value and passing one by reference?
5. Which of these declares a function pointer:
   a. `void (*myFunction)(int someInteger);`
   b. `void *myFunction(int someInteger);`
   c. `(void *)myFunction(int someInteger);`

Lesson 11

1. What is an enumerated type?
2. What is the advantage of specifying a value for one or more elements in an enumerated type?
3. How is a variable inside a `struct` accessed?
4. What is the difference between the dot operator and the arrow operator?

Lesson 12

1. What is object-oriented programming (OOP)?
2. What is a class?
3. What is a method?
4. What is a property?
5. What is a class' constructor for? Its destructor?
6. What are the C++ counterparts to C's `malloc()` and `free()`?
7. Why shouldn't `malloc()` and `free()` be used to allocate and free class objects?
8. What is the difference between a method with `public` access and one with `private` access?
9. How are arrays allocated with `new` properly freed?
10. What is data abstraction?

Lesson 13

1. What is inheritance?
2. What is the difference between `protected` access and `private` access?
3. What is a virtual function?
4. What is a static function?
5. What is function overloading?
6. With respect to access the parent class' methods, what are the implications of a child class using `protected` inheritance?