CptS 122 – Data Structures

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# Take-Home: Quiz 8 (15 pts) – Polymorphism in C++

***Part I: Short Answer.***

1. **(5 pts)** What is polymorphism? Explain.

Generally, the ability to appear in many forms. In object-oriented programming, **polymorphism** refers to a programming language's ability to process objects differently depending on their data type or class. More specifically, it is the ability to redefine methods for derived classes.

www.webopedia.com/TERM/P/**polymorphism**.html

***Part II: Fill-In-The-Blank.***

1. **(2 pts)** In C++, overridable functions are declared using the keyword \_\_\_\_virtual\_\_.

1. **(2 pts)** Casting a base class pointer to a derived class pointer is called\_\_\_\_polymorphism\_\_\_\_.

1. **(4 pts – 2 pts/blank)** A class becomes \_\_\_\_\_\_inherited\_\_\_\_\_ when at least one \_\_\_\_\_base class\_\_\_\_\_\_ virtual function is declared in it.

1. **(2 pts)** Polymorphism allows you to “program in the \_\_\_\_\_General\_\_\_\_\_\_” instead of “in the specific”. Instructor: Andrew S. O’Fallon