Review Questions:

1 -10, 17 -22, 47, 48

1. 1. **What is hardware?**

The physical components of a computer (Stuff you can touch).

* 1. **What are input and output devices used for?**

Input devices collect data, output devices display data.

* 1. **What is a peripheral device?**

A device that is externally connected to a computer.

1. **List and describe 5 components found on the motherboard.**

Processor- computes mathematical operations to run the computer.

RAM – fast, non-permanent form of data storage.

ROM – Stores permanent data.

Ports – Used to take in or give out data (USB slot, PCIE slot, etc.)

1. **Describe the flow of data between the components of the computer, starting with input.**

Input -> RAM -> CPU -> RAM -> Output

1. 1. **Describe one difference between operating systems software and applications software.**

Operating systems software is executed on start of the computer. Applications software can be run later.

* 1. Describe three different types of operating systems.
  2. What does environment refer to?

1. **What is a utility program? Give an example.**

A program with a clear purpose, Antivirus software.

1. **List four types of mobile computing devices.**

Phone, Tablet, Laptop, Smartwatches.

1. **What is a stylus used for?**

To more precisely write on a touch screen.

1. **Describe one type of wearable computer.**

Smart Glasses

1. **Why is cross-platform connectivity important to many computer users?**

Cross-platform connectivity is important because the amount of different types of software needed to read and write to data is reduced.

1. 1. **What is the difference between low- and high-level programming languages?**

A high-level language must be interpreted into a lower level language. Higher level languages generally write more like English.

* 1. **List three high-level programming languages.**

Python, JavaScript, Java.

* 1. **What is the difference between a compiler and an interpreter?**

An interpreter converts code in sequence whereas a compiler converts the entire code and runs it all at once.

* 1. **List an advantage of using an object-oriented programming language.**

You can make programs modular and not have to keep repeating code.

1. XXXXXXXXX
2. XXXXXXXXX
3. XXXXXXXXX
4. XXXXXXXXX
5. XXXXXXXXX
6. XXXXXXXXX
7. **Explain why the binary number system was adopted for use in computers.**

Because the 1s and 0s can be easily represented by a on or off state on a transistor.

1. 1. **What is the decimal equivalent of 1112**?

7

* 1. **What is the decimal equivalent of 2C16?**

44

1. **What is Unicode?**

A standardized code for encoded letters and symbols.

1. **How many bytes of data can 512 MB of RAM store?**

5.12 x 108 bytes.

1. **What are bits grouped in 16 to 64 called?**

They are called Words.

1. **When would an overflow error occur?**

Overflow errors occur when a mathematical operation requires a number that cannot be represented by the allotted number of binary digits.

**47.**

**a) What is copyright infringement?**

Copyright infringement is when a person violates a copyright contract by illegally using another person’s work or product, without proper legal work or financial royalties.

**b) Why is computer piracy such a concern to software developers?**

Computer piracy is a concern because it would mean that people get to use their products for free without compensating them for their efforts.

**c) What is a computer virus?**

A computer virus is a malicious application that is used to destroy and/or steal peoples data.

**d) Describe Phishing**.

Phishing is a type of scam where the scammer sets themselves up as a legitimate source to take important information such as ID, credit card details, etc.