Chapter Quiz

In the following quiz, you will be tested on concepts you learned in this chapter.

1 ⚠ Which keyword is used for defining a function?

2 ⚠ The following are optional when defining a basic function.

3 What is the basic idea of the **substitution model**?

4 What purpose do CBV and CBN have?

If the CBN evaluation of an expression terminates, then the CBV evaluation of the same expression is not guaranteed to terminate.

What does the following recursive function do?

```scala
def mysteryFunction(list: List[Int]): Int = {
  def mysteryAccum(list: List[Int], theMystery: Int): Int = {
    list match {
      case Nil => theMystery
      case x :: tail =>
        val newMystery = if (x > theMystery) x else theMystery
        mysteryAccum(tail, newMystery)
    }
  }
  mysteryAccum(list, 0)
}
```

7 What is the general purpose of Newton's method?

8 Which function definition will give an error?

9 What is the benefit of lexical scoping?

10 ! Which of the following is a tail recursive function?

1 1 Which of the following statements is true for blocks?

In the next chapter, we will continue our discussion on functions and dive a bit deeper into functional programming.