**Chapter 6 TEST**

**Graphing Calculator allowed (but mostly useless)**

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

**\_\_\_\_ 1.** What does the expression  simplify to?

|  |  |  |  |
| --- | --- | --- | --- |
| **A.** |  | **C.** |  |
| **B.** |  | **D.** |  |

**\_\_\_\_ 2.** Which expression is equivalent to ?

|  |  |  |  |
| --- | --- | --- | --- |
| **A.** |  | **C.** |  |
| **B.** |  | **D.** |  |

**Short Answer**

**3.** Prove that for

**4.** Solve , for .

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

**5.** What is the general solution, in radians, to the equation ?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

**6.** Solve over

**7.** Consider: .  
a) Determine the restrictions.  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
b) Prove that it’s an identity.

**8.** Determine the **exact** value of  without a calculator (show your work)

**9.** Consider .  
a) Determine the restrictions.  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
b) Prove that it’s an identity.