**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 $θ=\frac{π}{6}$

 **4.** Solve $sin2x+2cosx=0$, for $-π\leq x\leq 3π$.

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

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 **6.** Solve $2cos^{2}x+3sinx-3=0$ over $0\leq x<2π$

 **7.** Consider: $cscx+cotx=\frac{sinx}{1-cosx}$ .
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.