

Guest Student

WeBWorK assignment 04_InverseTrigs

Math 141 Spring 2006**Due: 02/01/2006 at 11:03pm EST**

1. (1 pt) Match each of the trigonometric expressions below with the equivalent non-trigonometric function from the following list. Enter the appropriate letter (A,B,C,D, or E) in each blank.

- A. $\tan(\arcsin(x/5))$
 B. $\cos(\arcsin(x/5))$
 C. $(1/2)\sin(2\arcsin(x/5))$
 D. $\sin(\arctan(x/5))$
 E. $\cos(\arctan(x/5))$

- 1. $\frac{\sqrt{25-x^2}}{5}$
 —2. $\frac{5}{\sqrt{25+x^2}}$
 —3. $\frac{x}{25}\sqrt{25-x^2}$

- 4. $\frac{x}{\sqrt{25+x^2}}$
 —5. $\frac{x}{\sqrt{25-x^2}}$

2. (1 pt) If $f(x) = 7\arcsin(x^3)$, find $f'(x)$.

3. (1 pt) If $f(x) = 8x\arcsin(x)$, find $f'(x)$.

Find $f'(0.3)$.

4. (1 pt) If $f(x) = 2\arctan(8x)$, find $f'(x)$.

Find $f'(2)$.

5. (1 pt) If $f(x) = 5\arctan(3e^x)$, find $f'(x)$.