Practice worksheet | Integration techniques and applications

Inverse-trigonometric derivatives and integrals

Name: _____ Date: _____

6 questions | 12 marks

1. Find $\int 3/(9+x^2)\,dx$. [2 marks]

2. Find $\int 2/\sqrt{1-4x^2}\,dx$. [2 marks]

3. Find $\int 1/(1+9x^2)\,dx$. [2 marks]

4. Evaluate $\int_0^{1/2} 1/\sqrt{1-x^2}\,dx$. [2 marks]

5. Find $\int 1/(x^2+16)\,dx$. [2 marks]

6. Differentiate arccos(x/2) on -2<x<2. [2 marks]