

MATH 151 Quiz 9B (Section 4.5 and 4.6)

NAME: _____

SECTION: _____

1. (4 pts) After 4 days a sample of radon-222 decayed to 38% of its original amount. What is the half-life of radon-222?

2. (2 pts) Evaluate the following:

(i) $\arccos\left(\cos\left(\frac{7\pi}{3}\right)\right)$

(ii) $\sin\left(2\arccos\left(\frac{-1}{3}\right)\right)$

3. (4 pts) Find the derivative of :

(i) $f(x) = \arcsin(\ln x)$

(ii) $g(x) = e^{\arctan x}$