

Written HW10 – MATH 2501 Fall 2021

**Due by 21 September for timely completion credit**

Determine  $\frac{d}{dx}\arcsin(x)$  by starting with  $y = \arcsin(x)$ . Then rewrite it as  $\sin(y) = x$ , and then apply  $\frac{d}{dx}$  to both sides using implicit differentiation (i.e. the chain rule). Full credit is only awarded if this is worked out entirely symbolically and an appropriate triangle is drawn (as was done in class for similar problems).