

### Problem Set 113

2.  $a \cos \theta$  is a much easier expression to integrate

4.  $-10x$

6.  $\arcsin x + C$

8.  $\arctan x + C$

10.  $-\frac{\sqrt{4-x^2}}{x} - \sin^{-1} \frac{x}{4} + C$

12.  $y = \pm k\sqrt{x^2 + 1}$

14.  $\langle 15, \pm 13 \rangle$

16.  $r^2 = \frac{1}{\sin \theta \cos \theta}$

18. 270.483 units

20. 1

