

**Solve:**

1) What is  $\frac{d}{dx} (-8 \sin x + 10 \cos x) \Big|_{x=2\pi}$  ?

2) Given  $k(x) = 4 \cos x$ .  
What is  $\frac{dk}{dx}$  ?

3) What is  $\frac{d}{dx} (2 \sin x - 7 \cos x)$  ?

4) Given  $d(x) = -4 \cos x$ .  
What is  $\frac{dy}{dx} \Big|_{x=3\pi/2}$  ?

5) What is  $\frac{d}{dx} -5\cos(x) + 4\csc(x)$  ?

6) Given  $a(x) = 2\csc(x) - 3\cos(x)$ , what is  $a'(x)$  ?

7) What is  $\frac{d}{dx} \tan(x)$  ?

8) Given  $k(x) = 2\cot(x) - 4\tan(x)$ .  
What is  $\frac{dk}{dx}$  ?