1. Sketch the region enclosed by the graphs of the given equations. Then, use a definite integral to find the exact value of the area of the region.

(a) 1

(b) \( \frac{\sqrt{3}}{2} \)

(c) \( \frac{\pi}{12} \)

(d) \( 2 - e \)

(e) \( \frac{1}{3} \)

(f) \( \frac{32}{3} \)

(g) \( \frac{81}{2} \)

(h) \( \frac{32}{3} \)