

1.  $-294$
2.  $\frac{37 + 24\sqrt{3} + 18\pi}{36}$
3.  $\frac{27 - 8\sqrt{3} - 3\sqrt{2}}{3} - \ln(\sqrt{2} + 1)$
4.  $0$
5.  $\frac{50 + 2e^{4\pi}}{13}$
6.  $\frac{15 + 48\pi}{30}$
7.  $26$
8.  $\frac{-1 - \sqrt{2}}{4}$
9.  $1$
10.  $-12 - 6\sqrt{2}$
11.  $-2$
12.  $(0, 4)$  (The open set from 0 to 4)
13.  $e^3$
14.  $0$