

Tenta MVE425 2015-08-26: svar.

1. (a)  $x = e^{-1}$   
(b)  $\frac{\ln 10}{0,64} \approx 3,6$  timmar.
  
2. (a)  $x = 6^\circ$ ,  $x = 30^\circ$ ,  $x = 78^\circ$   
(b)  $x = \frac{5\pi}{12} + n \cdot \pi$ ,  $n \in \mathbb{Z}$   
(c)  $x = \pm \frac{\pi}{8} + n \cdot \pi$ ,  $n \in \mathbb{Z}$
  
3. Sida  $\approx 2,15$  cm, vinklar  $\approx 107,3^\circ$  och  $\approx 52,7^\circ$ .
  
4.  $z = \sqrt{3} + i$ ,  $\sqrt{3} - i$ ,  $-\sqrt{3} + i$ ,  $-\sqrt{3} - i$ ,  $2i$ ,  $-2i$
  
5. (a) 7  
(b)  $\frac{1}{6}$
  
6.  $c = 13$ ,  $\phi = \arctan\left(-\frac{5}{12}\right) + 180^\circ \approx 157,4^\circ$
  
7.  $z = 2 + i$ ,  $z = -2i$ ,  $z = -1$
  
8. Se läroboken!