

Soluție

1. $z_1 = \frac{-3-7i}{2}, z_2 = \frac{-3+7i}{2}.$

2. $f(0) = -2m + 2 \geq 0 \Rightarrow m \in (-\infty; 1].$

3. $2 - x \geq 0, \sqrt{2-x} = \sqrt[3]{x-2} \Rightarrow x-2 \geq 0 \Rightarrow x = 2.$

4. Ambii membri sunt egali cu $\frac{(a+b)!}{a!b!}.$

5. $\frac{2m-2}{3-2} = \frac{1-m-4}{3-4} \Rightarrow m = -5.$

6. $\cos 2\alpha = 1 - 2\sin^2 \alpha \Rightarrow \sin \alpha = \frac{\sqrt{3}}{2}.$