Complexe getallen voorstelllen in het compexe vlak

Oefening 1.

1. $z_1 = 3 + 4i$ ……
2. $z_2 = 5\left(\cos\left(\frac{\pi}{4}\right) + i\sin\left(\frac{\pi}{4}\right)\right)$ ……
3. $z_3 = -2 + i$ ……
4. $z_4 = \sqrt{5}\left(\cos\left(\tan^{-1}\left(\frac{-1}{2}\right)\right) + i\sin\left(\tan^{-1}\left(\frac{-1}{2}\right)\right)\right)$ ……
5. $z_5 = 5$ ……
6. $z_6 = 5\left(\cos(0) + i\sin(0)\right)$ ……
7. $z_7 = -3 - 4i$ ……
8. $z_8 = 5\left(\cos\left(\pi + \tan^{-1}\left(\frac{4}{3}\right)\right) + i\sin\left(\pi + \tan^{-1}\left(\frac{4}{3}\right)\right)\right)$ ……
9. $z_9 = 2 - 2i$ ……
10. $z_10 = 2\sqrt{2}\left(\cos\left(\frac{-\pi}{4}\right) + i\sin\left(\frac{-\pi}{4}\right)\right)$ ……

Oefening 2.

1. $z_1 = 1 + i$ ……
2. $z_2 = \sqrt{2}\left(\cos\left(\frac{\pi}{4}\right) + i\sin\left(\frac{\pi}{4}\right)\right)$ ……
3. $z_3 = -1$ ……
4. $z_4 = 1\left(\cos(\pi) + i\sin(\pi)\right)$ ……
5. $z_5 = 0 + 5i$ ……
6. $z_6 = 5\left(\cos\left(\frac{\pi}{2}\right) + i\sin\left(\frac{\pi}{2}\right)\right)$ ……
7. $z_7 = -4 + 0i$ ……
8. $z_8 = 4\left(\cos(\pi) + i\sin(\pi)\right)$ ……
9. $z_9 = 3i$ ……
10. $z_10 = 3\left(\cos\left(\frac{\pi}{2}\right) + i\sin\left(\frac{\pi}{2}\right)\right)$ ……

Oefening 3.

1. $z_1 = 4 + 0i$ ……
2. $z_2 = 2\left(\cos\left(\frac{\pi}{2}\right) + i\sin\left(\frac{\pi}{2}\right)\right)$ ……
3. $z_3 = 0 + 2i$ ……
4. $z_4 = 4\left(\cos(0) + i\sin(0)\right)$ ……
5. $z_5 = -2 - 3i$ ……
6. $z_6 = \sqrt{13}\left(\cos\left(\pi + \tan^{-1}\left(\frac{3}{2}\right)\right) + i\sin\left(\pi + \tan^{-1}\left(\frac{3}{2}\right)\right)\right)$ ……

7. $z_7 = 1 - 3i$ ……
8. $z_8 = \sqrt{10}\left(\cos\left(\tan^{-1}\left(\frac{-3}{1}\right)\right) + i\sin\left(\tan^{-1}\left(\frac{-3}{1}\right)\right)\right)$ ……
9. $z_9 = 2 + 0i$ ……
10. $z_10 = 2\left(\cos(0) + i\sin(0)\right)$ ……

Oefening 4.

1. $z_1 = -1 + 0i$ ……
2. $z_2 = \sqrt{20}\left(\cos\left(\tan^{-1}\left(\frac{2}{-4}\right)\right) + i\sin\left(\tan^{-1}\left(\frac{2}{-4}\right)\right)\right)$ ……
3. $z_3 = -4 + 2i$ ……
4. $z_4 = 1\left(\cos(\pi) + i\sin(\pi)\right)$ ……
5. $z_5 = 0 + 4i$ ……
6. $z_6 = 4\left(\cos\left(\frac{\pi}{2}\right) + i\sin\left(\frac{\pi}{2}\right)\right)$ ……
7. $z_7 = 3 + 0i$ ……
8. $z_8 = 3\left(\cos(0) + i\sin(0)\right)$ ……
9. $z_9 = -5 + 5i$ ……
10. $z_10 = 5\sqrt{2}\left(\cos\left(\frac{3\pi}{4}\right) + i\sin\left(\frac{3\pi}{4}\right)\right)$ ……