A.SSE.3

Write Polynomial Given Roots NOTES

Given these roots, write the original polynomial (don't forget that imaginary and complex roots have a conjugate! They come in pairs!) Assume a=1

1. Roots are $x = 2$ and $x = -5$

2. Roots are $x = -6$ and $x = -3$

3. Roots are $x = 1,\ x = -1$, and $x = 3$

4. Root is $x = -5i$

Given these roots, write the original polynomial (don't forget that imaginary and complex roots have a conjugate! They come in pairs!) Assume a=1

5. Roots are $x = 3, x = -2, x = 0, x = 7$

6. Roots are $x = 2$ and $x = -4i$

7. Root is $x = 3 + 4i$

8. Roots are $x = -1$ and $x = 2 - 3i$