De Moivre's Theorem

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Question 1 (3)

Use De Moivre's Theorem to express $\cos(3x)$ as a polynomial in $\cos(x)$.

Question 2 (3)

Use De Moivre's Theorem to express $\sin(3x)$ as a polynomial in $\sin(x)$ and $\cos(x)$.

Question 3 (3)

Use De Moivre's Theorem to express $\cos(4x)$ as a polynomial in $\cos(x)$.

Question 4 (3)

Use De Moivre's Theorem to express $\sin(4x)$ as a polynomial in $\sin(x)$ and $\cos(x)$.

Question 5 (4)

Use De Moivre's Theorem to express $\cos(5x)$ as a polynomial in $\cos(x)$.

Question 6 (4)

Use De Moivre's Theorem to express $\sin(5x)$ as a polynomial in $\sin(x)$ and $\cos(x)$.

Question 7 (4)

Express $\cos(6x)$ as a polynomial in $\cos(x)$ using De Moivre's Theorem.

Question 8 (4)

Express $\sin(6x)$ as a polynomial in $\sin(x)$ and $\cos(x)$ using De Moivre's Theorem.

Question 9 (5)

Express $\cos(7x)$ as a polynomial in $\cos(x)$ using De Moivre's Theorem.

Question 10 (5)

Express $\sin(7x)$ as a polynomial in $\sin(x)$ and $\cos(x)$ using De Moivre's Theorem.