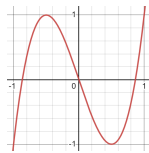
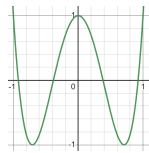
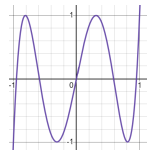
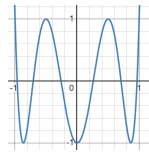
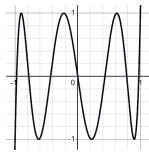
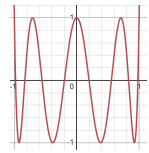
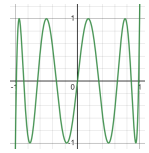


POLYNOMIALS AND SOUND

Graph	Polynomial	Graph	Polynomial
	$T_3(x) = 4x^3 - 3x$		$T_4(x) = 8x^4 - 8x^2 + 1$
	$T_5(x) = 16x^5 - 20x^3 + 5x$		$T_6(x) = 32x^6 - 48x^4 + 18x^2 - 1$
	$T_7(x) = 64x^7 - 112x^5 + 56x^3 - 7x$		$T_8(x) = 128x^8 - 256x^6 + 160x^4 - 32x^2 + 1$
	$T_9(x) = 256x^9 - 576x^7 + 432x^5 - 120x^3 + 9x$		

Use the table above to answer the following questions. Show your work on a separate sheet of paper.

- Find $T_3(x) + T_5(x)$.
- Find the difference: $T_4(x) - T_6(x)$.
- Find $T_8(x) - T_6(x)$.
- Find the sum of $T_9(x) + T_7(x)$.

Web Tool

To use the web tool and hear your polynomial, follow the steps below.

- 1) Go to k20center.ou.edu/e-learning/polynomials-sound/.
- 2) Turn down the *Effect Volume*.
- 3) Turn up the *Noeffect Volume*.
- 4) Select a "Sample #."
- 5) Select the "Start" or "Play" button.
- 6) Enter the new polynomial.
 - Select each coefficient or exponent to edit its value.
- 7) Turn down the *Noeffect volume*.
- 8) Turn up the *Effect volume*.