MATLAB 1 Answer Sheet – Individual Task 1

Course	**ENGR 13300**	**Semester**	*2024 Fall*
Assignment Name	*MAT1 Ind1*	**Section**	*LC 18*
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Task 1 - MATLAB as a Calculator

Part A:

Expression	MATLAB command	MATLAB result
$p = \frac{2^{3^2}}{13} + \frac{180}{\ln(60)} + \sqrt{10}$	p = 2^(3^2) / 13 + 180 / log(60) + sqrt(10);	P = 86.5100
$q = \left(15 - \frac{12^2}{4}(3^8 + 4)\right)^2$	Q = (15 - (12^2) / (4 * (3^8 + 4)))^2;	Q = 224.8355
$r = \left\lvert 7\cot^{-1}\left(\frac{11\pi}{6}\right)\right\rvert$	r = abs(7 * acot(11 * pi / 6));	R = 1.2034

Part B:

Expression	MATLAB command	MATLAB result
$a = x^5 z^2 - \left(\frac{7x}{2z}\right)^{5/3}$	a = x^5 * z^2 - (7 * x / (2 * z))^(5/3);	A = 81.0712
$b = \frac{443x}{2z} + \frac{e^{-xz}}{x - z}$	b = (443 * x) / (2 * z) + exp(-x * z) / (x - z);	B = 61.2653
$c = \frac{\ln(x)}{\sin(z)}$	c = log(x) / sin(z);	C = -0.2624
$d = \log(x)$	d = log(x);	D = 0.2624

Part C: *Flowchart*