

Math 181 Honors Quiz 2 Version A

1. Convert the repeating decimal $0.\overline{36}$ to a fraction.

2. Find the vertex of the parabola $y = x^2 - 6x$ by completing the square.

3. Use Pascal's triangle

					1									
				1		1								
			1		2		1							
		1		3		3		1						
	1		4		6		4		1					
	1	5		10		10		5		1				
1		6		15		20		15		6		1		
	1	7		21		35		35		21		7		1

to expand the term $(x_0 + \Delta x)^6$.

Math 181 Honors Quiz 2 Version A

4. Solve the inequality $x^2 < 4$.

5. Solve the inequality $\frac{3x + 4}{x - 1} \geq 1$.

6. Use the method of increments to find $\frac{dy}{dx}$ when $y = 3x^2$.