Method: testToString()		
Test #	Testing Class	Description
1	Number	positive double value
2	Number	negative double value
3	Variable	since there is no input for constructor --> should always return "x"
4	Polynomial	new Polynomial using a Number instance as the base
5	Polynomial	new Polynomial using a Variable instance as the base
6	Log	new Log using a Polynomial that has a Variable
7	Log	new Log using a Polynomial with Numbers
8	Log	new log with just a Number
9	Exp	Exp with Log with Polynomial with Variable
10	Exp	Exp with Polynomial
11	Exp	Exp with Number
12	Sin	Sin with Exp with Log with Polynomial with Variable and Number
13	Sin	Sin with Polynomial with Variable and Number
14	Sin	Sin with Number
15	Sin	Sin with Log and Polynomial with Variable and Number
16	Cos	Cos with Sin and Exp and Log and Polynomial with Variable and Number
17	Cos	Cos with Exp and Log with Polynomial with Variable and Number
18	Cos	Cos with Polynomial with Variable and Number
19	Cos	Cos with Number
20	Cos	Cos with Log and Polynomial with Variable and Number
21	BinaryOp	BinaryOp with Variable and Log function with Number
22	BinaryOp	Binary Op with Cos of Number and Sin of Polynomial with Variable
23	BinaryOp	BinaryOp with left and right operand as BinaryOps (right operand not in () bc it has the same operator)
24	BinaryOp	BinaryOp with left and right operand as (right operand is in () bc it does not have the same operator)
25	BinaryOp	Binary Op with right operand as BinaryOp (right operand not in () bc it has the same operator)
26	BinaryOp	Binary Op with right operand as BinaryOp (right operand is in () bc does not have the same operator)
Method: testEquals		

Test #	Testing Class	Description
27	Number	Compares to a Number with a different parameter
28	Number	Compares to a Number with the same parameter
29	Number	Compares Number to a Polynomial
30	Variable	Compares a Variable to a Variable
31	Variable	Compares a Variable to a Number
32	Polynomial	Compares a Polynomial to a Polynomial with the same power and operand
33	Polynomial	Compares a Polynomial to a Polynomial with the operand
34	Polynomial	Compares a Polynomial to a Polynomial with the same power
35	Polynomial	Compares a Polynomial to an Exp
36	Log	Compares a Log to a Log with the same operand
37	Log	Compares a Log to a Log with different operand
38	Log	Compares a Log to an Exp
39	Exp	Compares an Exp to an Exp with the same operand
40	Exp	Compares an Exp to an Exp with different operand
41	Exp	Copmares an Exp to a Number
42	Sin	Compares a Sin to a Sin with the same operand
43	Sin	Compares a Sin to a Sin with a different operand
44	Sin	Compares a Sin to a Cos
45	Cos	Compares a Cos to a Cos with the same operand
46	Cos	Compares a Cos to a Cos with different operand
47	Cos	Compares a Cos to an Exp
48	BinaryOp	Compares a BinaryOp to a BinaryOp with the same operands and operator
49	BinaryOp	Compares a BinaryOp to a BinaryOp with different left operands
50	BinaryOp	Compares a BinaryOp to a BinaryOp with different right operands
51	BinaryOp	Compares a BinaryOp to a BinaryOp with different operator
52	BinaryOp	Compares a BinaryOp to a Cos that has the first BinaryOp as its parameter
Method: testGetOperand()		
Test #	Testing Class	Description
53	Polynomial	Polynomial with Variable operand
54	Polynomial	Polynomial with Number operand
55	Polynomial	Polynomial with Cos operand
56	Polynomial	Polynomial with BinaryOp operand

57	Polynomial	Polynomial with Sin operand
58	Polynomial	Polynomial with Variable operand
59	Polynomial	Polynomial with Exp operand
60	Polynomial	Polynomial with Log operand
61	Polynomial	Polynomial with Polynomial operand
62	Log	Log with Variable operand
63	Log	Log with Number operand
64	Log	Log with Cos operand
65	Log	Log with BinaryOp operand
66	Log	Log with Sin operand
67	Log	Log with Variable operand
68	Log	Log with Exp operand
69	Log	Log with Log operand
70	Log	Log with Polynomial operand
71	Exp	Exp with Variable operand
72	Exp	Exp with Number operand
73	Exp	Exp with Cos operand
74	Exp	Exp with Sin operand
75	Exp	Exp with Variable operand
76	Exp	Exp with Exp operand
77	Exp	Exp with Log operand
78	Exp	Exp with Polynomial operand
79	Exp	Exp with BinaryOp operand
80	Sin	Sin with Variable operand
81	Sin	Sin with Number operand
82	Sin	Sin with Cos operand
83	Sin	Sin with Sin operand
84	Sin	Sin with Variable operand
85	Sin	Sin with Exp operand
86	Sin	Sin with Log operand
87	Sin	Sin with Polynomial operand
88	Sin	Sin with BinaryOp operand
89	Cos	Cos with Variable operand
90	Cos	Cos with Number operand

91	Cos	Cos with Cos operand
92	Cos	Cos with Sin operand
93	Cos	Cos with Variable operand
94	Cos	Cos with Exp operand
95	Cos	Cos with Log operand
96	Cos	Cos with Polynomial operand
97	Cos	Cos with BinaryOp operand
Method: testGetVal()		
Test #	Testing Class	Description
98	Number	Number with positive single digit decimal
99	Number	Number with negative single digit decimal
100	Number	Number with positive multiple digit decimal
101	Number	Number with negative multiple digit decimal
102	Number	Number with zeros
103	Number	Number with positive multiple digit decimal less than 1

Method: testGetLeftOperand()		
Test #	Testing Class	Description
104	BinaryOp	BinaryOp with a left operand of type Number
105	BinaryOp	BinaryOp with a left operand of type Cos
106	BinaryOp	BinaryOp with a left operand of type Sin
107	BinaryOp	BinaryOp with a left operand of type Variable
108	BinaryOp	BinaryOp with a left operand of type Polynomial
109	BinaryOp	BinaryOp with a left operand of type Exp
110	BinaryOp	BinaryOp with a left operand of type Log
111	BinaryOp	BinaryOp with a left operand of type BinaryOp
Method: testGetRightOperator()		
Test #	Testing Class	Description
112	BinaryOp	BinaryOp with a right operand of type Number
113	BinaryOp	BinaryOp with a right operand of type Cos
114	BinaryOp	BinaryOp with a right operand of type Sin
115	BinaryOp	BinaryOp with a right operand of type Variable
116	BinaryOp	BinaryOp with a right operand of type Polynomial
117	BinaryOp	BinaryOp with a right operand of type Exp
118	BinaryOp	BinaryOp with a right operand of type Log
119	BinaryOp	BinaryOp with a right operand of type BinaryOp
Method: testGetOperator()		
Test #	Testing Class	Description
120	BinaryOp	BinaryOp with an operator of DIV (/)
121	BinaryOp	BinaryOp with an operator of MULT (*)
122	BinaryOp	BinaryOp with an operator of PLUS (+)
123	BinaryOp	BinaryOp with an operator of SUB (-)
Method: testGetPower()		
Test #	Testing Class	Description
124	Polynomial	Number with positive single digit decimal
125	Polynomial	Number with negative single digit decimal

126	Polynomial	Number with positive multiple digit decimal
127	Polynomial	Number with negative multiple digit decimal
128	Polynomial	Number with zeros
129	Polynomial	Number with positive multiple digit decimal less than 1
Method: testDerivative()		
Test #	Testing Class	Description
130	Number	Derivative of Number with positive single digit decimal
131	Number	Derivative of Number with negative single digit decimal
132	Number	Derivative of Number with positive multiple digit decimal
133	Number	Derivative of Number with negative multiple digit decimal
134	Number	Derivative of Number with zeros
135	Number	Derivative of Number with positive multiple digit decimal less than 1
136	Polynomial	Derivative of Polynomial with positive single digit decimal
137	Polynomial	Derivative of Polynomial with negative single digit decimal
138	Polynomial	Derivative of Polynomial with positive multiple digit decimal
139	Polynomial	Derivative of Polynomial with negative multiple digit decimal
140	Polynomial	Derivative of Polynomial with zeros
141	Polynomial	Derivative of Polynomial with positive multiple digit decimal less than 1
142	Variable	Derivative of Variable
143	Log	Derivative of Log with Number as an operand
144	Log	Derivative of Log with Cos as an operand
145	Log	Derivative of Log with Sin as an operand
146	Log	Derivative of Log with Variable as an operand
147	Log	Derivative of Log with Polynomial as an operand
148	Log	Derivative of Log with Exp as an operand
149	Log	Derivative of Log with Log as an operand
150	Log	Derivative of Log with BinaryOp as an operand
151	Exp	Derivative of Exp with Number as an operand
152	Exp	Derivative of Exp with Cos as an operand
153	Exp	Derivative of Exp with Sin as an operand
154	Exp	Derivative of Exp with Variable as an operand
155	Exp	Derivative of Exp with Polynomial as an operand

156	Exp	Derivative of Exp with Exp as an operand
157	Exp	Derivative of Exp with Log as an operand
158	Exp	Derivative of Exp with BinaryOp as an operand
159	Sin	Derivative of Sin with Number as an operand
160	Sin	Derivative of Sin with Cos as an operand
161	Sin	Derivative of Sin with Sin as an operand
162	Sin	Derivative of Sin with Variable as an operand
163	Sin	Derivative of Sin with Polynomial as an operand
164	Sin	Derivative of Sin with Exp as an operand
165	Sin	Derivative of Sin with Log as an operand
166	Sin	Derivative of Sin with BinaryOp as an operand
167	Cos	Derivative of Cos with Number as an operand
168	Cos	Derivative of Cos with Cos as an operand
169	Cos	Derivative of Cos with Sin as an operand
170	Cos	Derivative of Cos with Variable as an operand
171	Cos	Derivative of Cos with Polynomial as an operand
172	Cos	Derivative of Cos with Exp as an operand
173	Cos	Derivative of Cos with Log as an operand
174	Cos	Derivative of Cos with BinaryOp as an operand
175	BinaryOp	Derivative of BinaryOp with Number as an operand
176	BinaryOp	Derivative of BinaryOp with Cos as an operand
177	BinaryOp	Derivative of BinaryOp with Sin as an operand
178	BinaryOp	Derivative of BinaryOp with Variable as an operand
179	BinaryOp	Derivative of BinaryOp with Polynomial as an operand
180	BinaryOp	Derivative of BinaryOp with Exp as an operand
181	BinaryOp	Derivative of BinaryOp with Log as an operand
182	BinaryOp	Derivative of BinaryOp with BinaryOp as an operand

Method: testValue()		
Test #	Testing Class	Description
183	Number	Value of a positive Number
184	Number	Value of a negative Number
185	Variable	Value of a Variable
186	Polynomial	Value of a Polynomial that has a Power less than 1
187	Polynomial	Value of a Polynomial that has a Power greater than 1
188	Polynomial	Value of a Polynomial with a Variable (Should throw an UnsupportedOperationException error)
189	Log	Value of a Log that has a small operand
190	Log	Value of a Log that has a larger operand
191	Log	Value of a Log with a Variable (Should throw an UnsupportedOperationException error)
192	Log	Value of a Log with a negative Number (Should return a NaN value)
193	Exp	Value of an Exp that has an operand of a negative Number
194	Exp	Value of an Exp that has an operand of a positive Number
195	Exp	Value of an Exp that has an operand of zero
196	Exp	Value of an Exp with a Variable (Should throw an UnsupportedOperationException error)
197	Sin	Value of Sin that has a negative operand
198	Sin	Value of Sin that has a positive operand
199	Sin	Value of Sin that has an operand of zero
200	Sin	Value of Sin that has a Polynomial operand
201	Sin	Value of Sin with a Variable (Should throw an UnsupportedOperationException error)
202	Cos	Value of Cos that has a negative operand
203	Cos	Value of Cos that has a positive operand
204	Cos	Value of Cos that has an operand of zero
205	Cos	Value of Cos that has a Polynomial operand
206	Cos	Value of Cos with a Variable (Should throw an UnsupportedOperationException error)
207	BinaryOp	Value of BinaryOp that has Number operands
208	BinaryOp	Value of BinaryOp that has Polynomial operands

209	BinaryOp	Value of BinaryOp that has Log operands
210	BinaryOp	Value of BinaryOp that has Exp operands
211	BinaryOp	Value of BinaryOp that has Sin operands
212	BinaryOp	Value of BinaryOp that has Cos operands
213	BinaryOp	Value of BinaryOp that has Polynomial and Number operands
214	BinaryOp	Value of BinaryOp that has Exp and Log operands
215	BinaryOp	Value of BinaryOp with a Variable when added (Should throw an UnsupportedOperationException error)
216	BinaryOp	Value of BinaryOp with a Variable when subtracted (Should throw an UnsupportedOperationException error)
217	BinaryOp	Value of BinaryOp with a Variable when multiplied (Should throw an UnsupportedOperationException error)
218	BinaryOp	Value of BinaryOp with a Variable when divided (Should throw an UnsupportedOperationException error)
Method: testValueWithInputs()		
Test #	Testing Class	Description
219	Number	Value of Number with Variable substitution
220	Variable	Value of Variable with Variable substitution
221	Polynomial	Value of Polynomial with Variable substitution
222	Log	Value of Log with Variable substitution
223	Log	Value of Log with Variable substitution
224	Exp	Value of Exp with Variable substitution
225	Exp	Value of Exp with Variable substitution
226	Sin	Value of Sin with Variable substitution
227	Sin	Value of Sin with Variable substitution
228	Cos	Value of Cos with Variable substitution
229	Cos	Value of Cos with Variable substitution
230	BinaryOp	Value of BinaryOp with Variable substitution
231	BinaryOp	Value of BinaryOp with Variable substitution
232	BinaryOp	Value of BinaryOp with Variable substitution
233	BinaryOp	Value of BinaryOp with Variable substitution
234	BinaryOp	Value of BinaryOp with Variable substitution

235	BinaryOp	Value of BinaryOp with Variable substitution
236	BinaryOp	Value of BinaryOp with Variable substitution
237	BinaryOp	Value of BinaryOp with Variable substitution