

Question	Topic	Reference
1	Determine whether y is a function of x , given a graph/table/equation in x & y	page 27 #9-16
2	Determine whether y is a function of x , given an equation in x & y	workbook page 189 #2
3	Evaluate a piecewise defined function at a point in the domain of the function	page 11 #31
4	Evaluate a piecewise defined function at a point in the domain of the function	workbook page 193 #13
5	Evaluate a composition of functions at a point, given one or both of the functions is defined piecewise	workbook page 201 #44
6	Word problem - break even (where are cost and revenue equal to each other)	
7		
8	Given a relationship between 2 variables expressed in words, use this relationship to express one variable as a function of the other	page 58-59 #1-8
9	Word problem - composition of functions	workbook page 201 #42
10	Word problem (linear functions) - Given an initial value and a constant rate of change, determine a linear function to represent the situation	page 122 #59
11	Given the equations of two linear functions, determine the value at which the functions are equal	page 60 #13
12	Given the equation of a transformation of the graph of f , describe the transformation(s) in words	page 76 #19-30
13	Given a function representing the composition of two functions, determine possible inside and outside functions	page 92 #45-51
14	Given the domain of f and the domain of g , and the zeros of g , determine the domain of f/g	page 91 #13-16
15	Given a point on the graph of a function f , determine a point that must be on the graph of some transformation of f	workbook page 199 #36
16	Evaluate the composition of two functions at a point in the domain	page 91 #19-26
17	Given a function represented by a graph or a table of values, find the composition at a given point in the domain	workbook page 201 #44
18	Given a function represented by a graph or a table of values, find the value of the inverse function at a given point in the domain	workbook page 201 #44
19	Word problem - motion (e.g. train leaves the station...)	page 123 #75-76
20	Given the equation for a quadratic function, identify the graph	page 137 #33-40
21	Given the graph of a quadratic function with the vertex and one other point labeled, determine the equation of the function	page 137 #15-20
22	Given the equation for a quadratic function, determine the vertex, max/min value, and x-intercept(s), if any	page 137 #33-40
23	Given the graph of a quadratic function, determine the value of the independent variable that yields the max/min value of the function	
24	Given the equation for a quadratic function in general form, write in standard form	page 137 #21-32
25	Given the equation for a quadratic function involving parameters in the coefficients, find the vertex in terms of those parameters	page 137 #41
26	Given the equation for a quadratic function, determine the number of zeros or x-intercepts	page 137 #33-40
27	Given the equation for a quadratic function in general form, find the vertex	workbook page 206 #70
28	Given the vertex and one other point on the graph of a quadratic function, determine the equation of the function	page 137 #15-20
29	Given the equation for a quadratic function in general form, find the vertex	page 137 #33-40
30	Word problem (quadratic function) - Given the equation of a quadratic function, solve for the value(s) of the independent variable corresponding to a given value of the dependent variable	page 133 Ex. 7
31	Word problem (finding the max/min value of a quadratic) - Given the equation of a quadratic function, determine the maximum/minimum value of the function	page 137 #41-42
32	Word problem (finding the max/min value of a quadratic) - Given a description in words, set up a quadratic function to represent the situation, then determine the min/max value of function	page 134 Ex. 8
33	Given the equation of a quadratic function, find the x-intercept(s), if any	page 137 #33-40
34	Word problem (finding the max/min value of a quadratic) - Given the equation of a quadratic function, determine the maximum/minimum value of the function	page 137 #41-42
35	Evaluating a sum given in sigma notation	workbook page 207 #78
36	Evaluating a sum given in sigma notation	workbook page 207 #79
37	Given the equation of a polynomial, determine the degree and the leading coefficient	page 170 Ex. 3
38	Given the equation of a polynomial, determine the end behavior	page 172 Ex. 4
39	Given the graph of a polynomial function, determine the possible degree using the end behavior, zeros, and turning points	workbook page 209 #83
40	Given the graph of a function, determine whether the function could be a polynomial of odd degree	page 176 #19-24
41		
42	Given the graph of a polynomial function, determine a possible expression to represent the function	page 189 #59-61
43	Given a polynomial in factored form, determine the degree, zeros, intercepts, and long-term behavior of the graph of the polynomial	page 177 #31-46
44	Given the equation of a polynomial of 3rd or 4th degree, find the exact value of the real zeros	page 182 Ex. 2
45	Given the equation of a polynomial of 3rd or 4th degree, find the exact value of all rational zeros	page 188 #31-35
46		
47	Given the equation of a polynomial of 3rd or 4th degree, find the exact value of all real zeros	page 188 #37
48	Given the equation of a polynomial of 3rd or 4th degree, factor completely	page 188 #31-35
49	Given the equation of a polynomial of 3rd or 4th degree, find the exact value of all real zeros	page 188 #11
50		page 182 blue box
51	Determine the quotient and remainder when one polynomial is divided by a polynomial of equal or lower degree	page 188 #1-5
52	Given the zeros of a polynomial, write the equation of the polynomial	page 188 #25
53	Determine the quotient and remainder when one polynomial is divided by a polynomial of equal or lower degree	page 188 #4-5
54	Given the equation of a polynomial, determine the end behavior	page 176 #7-12
55	Given the zeros of a polynomial and their multiplicities, write the equation of the polynomial	page 189 #59-61
56	Given the equation for a rational function, determine the vertical asymptote(s), if any	page 201 Ex. 7
57	Given the equation for a rational function in which the numerator and denominator are factored, determine the zeros, all asymptotes, and the domain	page 205 #33-37
58		
59	Given the equation for a rational function, identify the important features (such as long-term behavior, asymptotes, holes, and intercepts) of the graph	page 205 #33-37
60	Given the equation for a rational function, identify the important features (such as long-term behavior, asymptotes, holes, and intercepts) of the graph	page 205 #39-41
61	Given the equation of a rational function in which the degree of the numerator is one more than the degree of the denominator, find all asymptotes	page 205 #35-36
62	Given the equation for a rational function, determine the vertical asymptote(s), if any	page 205 #29-33
63	Given the equation for a rational function, determine the graph	page 205 #19-23
64	Given the vertical asymptote(s), the horizontal asymptote, and the x-intercept of a rational function, determine a possible expression to represent the function	page 205 #27-37

65	Given the equation for a rational function, determine the end behavior as x approaches infinity	page 198 Ex. 4
66	Given the equation for a rational function, determine the y -intercept and zeros, if any	page 205 #33-37
67	Given the graph of a rational function, find a possible equation to represent the function	page 205 #56
68	Given the graph of a rational function, determine whether a given expression could represent the function	
69	Given the vertical asymptote, the horizontal asymptote, and a point on the graph of a rational function, find the x -intercept of the function	workbook page 214 #112
70	Identify important features (such as domain/range, increasing/decreasing, and intercepts) of a given exponential function	page 224-225 blue boxes
71	Given the equation of an exponential function that has been shifted up/down and/or left/right, find the domain and range	page 232 #7-11
72	Given the graph of an exponential function in which the y -intercept and one other point are labeled, find the equation of the function	page 233 #35
73	Word problem (compound interest) - Given an initial investment, the number of years, and the type of compounding, determine the final balance	page 227 Ex. 4
74	Identify important features (such as intercepts, increasing/decreasing, continuous or not) of the graph of a logarithmic function	page 264-265 blue boxes
75	Find the x -intercept of a logarithmic function	page 265 Ex. 5
76	Given a table of value representing $f(x) = a + \log_b(x)$, determine the values of a and b	workbook page 219 #149
77	Given a point on the graph of a one-to-one function, determine whether or not a given point is on the graph of f or f inverse	workbook page 217 #135
78	Given a table of values representing a function, determine whether the function is one-to-one	
79	Given the equation of a one-to-one function f , evaluate the composition of f and f inverse at a point in the domain	
80	Given the equation for a function, determine whether the function is one-to-one	page 259 #9-15
81	Given the graph of a one-to-one function, identify the graph of its inverse function	page 259 #37-39
82	Given the graph of a function, determine whether or not it has an inverse function	page 259 #9-15
83	Given the equation of a one-to-one function, find the equation for its inverse	page 259 #21-23
84	Given a point on the graph of a one-to-one function, find a point on the graph of its inverse	workbook page 217 #138
85	Given the equation of a one-to-one function, find the equation for its inverse	page 259 #31-34
86	Use log properties to identify whether given statements involving logarithms are true or false	page 266 blue boxes
87	Given a table of values representing a function f , determine a table of values for f inverse, and a table of values for f inverse of $2x$	
88	Given the equation of a one-to-one function, find the equation for its inverse	workbook page 219 #147
89	Given a table of values representing a function f , determine a table of values for $h = 1/\sqrt{f}$, and evaluate h inverse of a particular value	
90	Given a table of values representing a function f , determine a table of values for $1/f$, f squared, etc., and determine whether the resulting function is one-to-one	
91	Identify the graph of the inverse of a given logarithmic function	page 260-261
92	Given a logarithmic function, determine the domain, the range, and whether it is one-to-one	page 264-265 blue boxes
93	Given the equation of a logarithmic function, determine the domain	page 271 #35-37
94	Given the equation of a logarithmic function, determine the x -intercept	page 271 #35-37
95	Rewrite an exponential equation in logarithmic form	page 270 #5-6
96	Use log properties to simplify a logarithmic expression	page 271 #26
97	Evaluate a logarithmic expression and solve a logarithmic equation	page 282 #19-23
98	Identify the graph of a transformation of a logarithmic function	page 271 #33-35
99		page 266 blue boxes
100	Express the sum/difference/multiple of logarithms with the same base as the logarithm of a single expression	page 267 Ex. 7
101	Expand the logarithm of a single expression as much as possible into the sum/difference/multiple of logarithms	page 267 Ex. 6
102	Solve an exponential equation using natural logarithms	page 276 Ex. 4
103	Find the domain of a logarithmic function	page 271 #35-38
104	Solve an exponential equation with variable exponents on both sides of the equation	page 282 #13-18
105	Solve an exponential equation with variable exponents on both sides of the equation	page 283 #49
106	Solve a logarithmic equation with a single logarithmic expression	page 278 Ex. 6
107	Solve a logarithmic equation with two or more logarithmic expressions involving the same base	page 279 Ex. 7
108	Solve a logarithmic equation with two or more logarithmic expressions involving the same base	page 282-283 #41-47
109	Word problem - Given an exponential growth formula for a population, find the doubling time of the population	page 283 #57
110	Word problem - Given two data points, create an exponential growth/decay model, and use that model to estimate another value for the function	workbook page 181-183
111	Word problem (compound interest) - Given an initial investment, a final balance, the number of years, and the type of compounding, use the compound interest formula to solve for the interest rate	workbook page 215 #122
112	Word problem (Newton's law of cooling) - Given the formula, and a set of initial conditions, solve for the time it takes for the object to reach a given temperature	page 244 Ex. 7
113	Word problem - Given a formula to represent an exponential growth/decay model, use that model to estimate	workbook page 184-185