**Math 20-1 Chapter 5 Radical Expressions Operations**

1. Order the radical expressions in each set from least to greatest.

 a)  b) 

1. Use your knowledge of radicals to show that  is equivalent to

a) 

b) 

c) 

Which one of these equivalent expressions would be expressed in lowest terms? Explain.

1. Express each radical in simplest form as a mixed radical, .

a)  b) 

c)  d) 

1. Express each as an entire radical.

a)  b) 

c)  d) 

1. Simplify .
2. True or False. Correct all false statements.

a)  b)  c) 

1. The horizontal distance, d, in kilometers that can be viewed from a given height, h, in metres above the ground is given by . What distance can be seen from a height of 100 meters? Express the answer in simplest terms.
2. Simplify each and express in the form .

a)  b) 

c)  d) 

e)  f) 

g)  h) 

i)  k) 

1. Determine the exact value in simplest form for the area of each figure.

a) b)

1. Express each in simplest form with a rational denominator.

a)  b) 

c)  d) 

1. Determine the exact value of the primary trig ratios given the point on the terminal arm of an angle in standard position. Radicals must be in simplest form with a rational denominator.
2. Use the quadratic formula to determine the exact roots of the equation .