

NAME

Solving Quadratic and Other Equations

3.2

Set

Topic: Finding arithmetic and geometric means and making meaning of rational exponents.

You may have found arithmetic and geometric means in your prior work. Finding arithmetic and geometric means requires finding values of a sequence between given values from non-consecutive terms. In each of the sequences below determine the means and show how you found them.

Find the *arithmetic* means for the following, show your work.

10.

x	1	2	3
y	5		11

11.

x	1	2	3	4	5
y	18				-10

12.

x	1	2	3	4	5	6	7
y	12						-6

Find the *geometric* means for the following, show your work.

13.

x	1	2	3
y	3		12

14.

x	1	2	3	4
y	7			875

15.

x	1	2	3	4	5	6
y	4					972



NAME _____

Solving Quadratic and Other Equations

3.2

16.

Fill in the table of values and find the factor used to move between whole number values, F_w , as well as the factor, F_c , used to move between each column of the table.

x	0	$\frac{1}{2}$	1	$\frac{3}{2}$	2
y	4		16		

$F_w =$
 $F_c =$

17.

Fill in the table of values and find the factor used to move between whole number values, F_w , as well as the factor, F_c , used to move between each column of the table.

x	0	$\frac{1}{2}$	1	$\frac{3}{2}$	2
y	4		8		

$F_w =$
 $F_c =$

18.

Fill in the table of values and find the factor used to move between whole number values, F_w , as well as the factor, F_c , used to move between each column of the table.

x	0	$\frac{1}{2}$	1	$\frac{3}{2}$	2
y	5		15		

$F_w =$
 $F_c =$

