Secondary Math 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Right Triangle Proportions Date/Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

is a right angle and 

1. If , then , , and .
2. If , then , , and .

A

B

N

C

2

1

1. From exercise 2 we see that . Likewise, .
2. a. Since 

b. Since 

c. Since 

1. The diagram shows a right triangle with the altitude drawn to the hypotenuse.

e

j

p

k

f

m

1. *p* is the geometric mean between \_\_\_\_\_\_ and \_\_\_\_\_\_.
2. *e* is the geometric mean between \_\_\_\_\_\_ and \_\_\_\_\_\_.
3. *f* is the geometric mean between \_\_\_\_\_\_ and \_\_\_\_\_\_.

Simplify the radical expressions.

1.  10.  14.  18. 
2.  11.  15.  19. 
3.  12.  16.  20. 
4.  13.  17.  21. 

Find the geometric mean between the two numbers.

22. 2 and 8 24. 3 and 27 26. 13 and 25

1. 1 and 50 25. 6 and 10 27. 2 and 

Each diagram shows a right  with the altitude drawn to the hypotenuse. Find the values of the variables.

28. 29. 30.

y

x

z

y

x

z

y

x

z

25

4

7

9





9

x

2

15

y

x

z

31. 32. 33.

y

z

6

y

z

8

8

x

x

w

25

34. 35. 36.

x

z

x

10



2

z

y

y

6

18

z

y