

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Arithmetic and Geometric Means

Insert the missing arithmetic or geometric means. Use a positive common ratio for every geometric sequence.

Arithmetic means

1. Arithmetic

-4, _____, _____, _____, -16

Missing terms: _____

2. Arithmetic

3, _____, _____, 21

Missing terms: _____

3. Arithmetic

-2, _____, _____, 10

Missing terms: _____

4. Arithmetic

3, _____, -3

Missing terms: _____

5. Arithmetic

-1, _____, _____, _____, 15

Missing terms: _____

6. Arithmetic

5, _____, -1

Missing terms: _____

Geometric means · use a positive common ratio

7. Geometric · positive r

-3, _____, _____, _____, -1875

Missing terms: _____

8. Geometric · positive r

5, _____, _____, _____, 80

Missing terms: _____

9. Geometric · positive r

-1, _____, -25

Missing terms: _____

10. Geometric · positive r

4, _____, _____, 108

Missing terms: _____

11. Geometric · positive r

-1, _____, -16

Missing terms: _____

12. Geometric · positive r

5, _____, _____, 135

Missing terms: _____

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Arithmetic and Geometric Means

Answer Key

Insert the missing arithmetic or geometric means. Use a positive common ratio for every geometric sequence.

Arithmetic means

1. Arithmetic

-4, _____, _____, _____, -16

-7, -10, -13; $d = -3$

2. Arithmetic

3, _____, _____, 21

9, 15; $d = 6$

3. Arithmetic

-2, _____, _____, 10

2, 6; $d = 4$

4. Arithmetic

3, _____, -3

0; $d = -3$

5. Arithmetic

-1, _____, _____, _____, 15

3, 7, 11; $d = 4$

6. Arithmetic

5, _____, -1

2; $d = -3$

Geometric means · use a positive common ratio

7. Geometric · positive r

-3, _____, _____, _____, -1875

-15, -75, -375; $r = 5$

8. Geometric · positive r

5, _____, _____, _____, 80

10, 20, 40; $r = 2$

9. Geometric · positive r

-1, _____, -25

-5; $r = 5$

10. Geometric · positive r

4, _____, _____, 108

12, 36; $r = 3$

11. Geometric · positive r

-1, _____, -16

-4; $r = 4$

12. Geometric · positive r

5, _____, _____, 135

15, 45; $r = 3$