Name: _____ Date: _____

Fresh Math

Geometric Series - Medium

Find the sum of the geometric series. Use S = a(1 - r^n)/(1 - r) or add the terms.

1. 5 + 15 + 45 + ... + 1215 (6 terms)

2. 5 - 10 + 20 + ... + 320 (7 terms)

3. 1 - 2 + 4 + ... - 32 (6 terms)

4. 3 + 6 + 12 + ... + 48 (5 terms)

5. 4 - 8 + 16 + ... + 64 (5 terms)

6. 5 + 10 + 20 + ... + 640 (8 terms)

7. 5 - 10 + 20 + ... + 80 (5 terms)

8. 4 + 12 + 36 + ... + 108 (4 terms)

9. 3 + 9 + 27 + ... + 243 (5 terms)

10. 3 + 9 + 27 + ... + 729 (6 terms)

Name: _____ Date: _____

Fresh Math

Geometric Series - Medium

Find the sum of the geometric series. Use S = a(1 - r^n)/(1 - r) or add the terms.

11. 1 + 2 + 4 + ... + 64 (7 terms)

12. 4 + 12 + 36 + ... + 972 (6 terms)

13. 2 + 4 + 8 + ... + 256 (8 terms)

14. 1 + 3 + 9 + ... + 243 (6 terms)

15. 1 + 3 + 9 + ... + 81 (5 terms)

16. 4 + 8 + 16 + ... + 512 (8 terms)

17. 2 + 6 + 18 + ... + 162 (5 terms)

18. 5 + 10 + 20 + ... + 80 (5 terms)

19. 3 + 6 + 12 + ... + 192 (7 terms)

20. 5 - 10 + 20 + ... - 160 (6 terms)

Geometric Series - Medium - Answer Key

1. 5 + 15 + 45 + ... + 1215 (6 terms)
   1820

2. 5 - 10 + 20 + ... + 320 (7 terms)
   215

3. 1 - 2 + 4 + ... - 32 (6 terms)
   -21

4. 3 + 6 + 12 + ... + 48 (5 terms)
   93

5. 4 - 8 + 16 + ... + 64 (5 terms)
   44

6. 5 + 10 + 20 + ... + 640 (8 terms)
   1275

7. 5 - 10 + 20 + ... + 80 (5 terms)
   55

8. 4 + 12 + 36 + ... + 108 (4 terms)
   160

9. 3 + 9 + 27 + ... + 243 (5 terms)
   363

10. 3 + 9 + 27 + ... + 729 (6 terms)
    1092

Geometric Series - Medium - Answer Key

11. 1 + 2 + 4 + ... + 64 (7 terms)
    127

12. 4 + 12 + 36 + ... + 972 (6 terms)
    1456

13. 2 + 4 + 8 + ... + 256 (8 terms)
    510

14. 1 + 3 + 9 + ... + 243 (6 terms)
    364

15. 1 + 3 + 9 + ... + 81 (5 terms)
    121

16. 4 + 8 + 16 + ... + 512 (8 terms)
    1020

17. 2 + 6 + 18 + ... + 162 (5 terms)
    242

18. 5 + 10 + 20 + ... + 80 (5 terms)
    155

19. 3 + 6 + 12 + ... + 192 (7 terms)
    381

20. 5 - 10 + 20 + ... - 160 (6 terms)
    -105