

# ALGEBRA 2

Tues., Apr. 11/Wed., Apr. 12

Sec. 8.1 pp. 414-415 11, 13, 43, 45

Sec. 8.2 pp. 422-424

3-9 odd, 13  $a_{75}$ , 16  $a_{30}$ , 18  $a_{20}$ ,

47 (5 to 26), 50 (8 to 35),

52 (2 to 21), 1-3 at right

1. Find  $S_n$  for each of the following:

(a)  $37 + 45 + 53 + \dots + 7573$

(b)  $289 + 273 + 257 + \dots + -223$

2. In February you start a holiday savings account with a deposit of \$20. You increase each monthly deposit by 5 dollars until the end of the year. How much money will you have saved by the end of the year?

3. A marching band formation has 9 rows. The first three rows have 9, 11, and 13 musicians, respectively. How many musicians are in the last row and how many musicians are in the band?

Thurs., Apr. 13/Fri., Apr. 14

Sec. 8.3 pp. 430-432

5-11 odd, 15  $a_9$ , 18  $a_7$ , 21  $a_8$ ,

47 (2 to 9), 48 (5 to 11),

52, 53, 54, 59, a-b at right

Sec. 8.4 p. 439

7, 10, c-f, 17, 18

Find  $S_n$  for each of the following:

(a)  $1/3 + 2 + 12 + \dots + 17,496$

(b)  $128 - 32 + 8 - \dots + 1/32$

Determine whether each infinite geometric series converges or diverges.

If it converges, find the sum.

(c)  $27 + 18 + 12 + \dots$

(d)  $4 + 24 + 144 + \dots$

(e)  $9/8 - 3/2 + 2 - \dots$

(f)  $48 - 36 + 27 - \dots$

*Math Matters Due*

Mon., Apr. 17/Tues., Apr. 18

## SEQUENCES & SERIES QUEST

*Journal Due*

Wed., Apr. 19/Thurs., Apr. 20

Semester Review

Fri., Apr. 21/Tues., Apr. 25

Semester Review

Thurs., Apr. 27/Fri., Apr. 28

# SEMESTER EXAM

*End-of-Year Journal Due Next Class*

## ANSWERS

### Sec. 8.2 pp. 422-424

13. 604

16. -117

18. 12.25 or  $49/4$

47. 616

50. -2492

52. 10

1. a) 3,588,115

b) 1089

2. \$495

3. a) 25 b) 153 members

### Sec. 8.3 pp. 430-432

15. 1, 562, 500

18.  $3/125$  or 0.024

21. -2843.1

47. 40,353,600

48. 9,786,112

52.  $\frac{1,272,249}{262,144} \approx 4.85$

54. -137,774

a) 20,995.13

b)  $\frac{3277}{32}$

### Sec. 8.4 p. 439

10. diverges,  $|r| \geq 1$

c) converges;  $S = 81$

d) diverges,  $|r| \geq 1$

e) diverges,  $|r| \geq 1$

f) converges;  $S = \frac{192}{7}$

18. \$2,916,667