

Name: _____ Date: _____

Musical Madness

Exploring Remainders

Chantel wants to listen to her favorite songs on the way to school. She needs to record the songs from her compact disc collection onto a cassette so that she can play them on her walkman. Chantel has a 60 minute cassette with each side being 30 minutes in length. List some of the songs she can put on each side so that she uses both sides of the cassette. [Hint: Use the **⇨R** key.]

<u>Artist</u>	<u>Song</u>	<u>Length</u>
Everything but the Girl	Missing	4:04
Chris Isaak	Forever Young	3:20
Vanessa Williams	The Sweetest Days	3:31
Jon Secada	Just Another Day	5:25
Patty Smyth	Should be Laughing	5:03
Gloria Estefan	Coming Out of the Dark	4:03
Gloria Estefan	Rhythm is Gonna Get You	3:56
Kathy Mattea	Walking Away a Winner	3 :30
Cheryl Crow	All I Wanna Do	4:32
Mariah Carey	Someday	3:56
Mariah Carey	I'll Be There	4:42
10,000 Maniacs	These Are the Days	4:22
Boyz II Men	Motown Philly	3:55
Boyz II Men	On Bended Knee	3:29
Bonnie Raitt	You Got It	3 :25
Elvis Presley	Hound Dog	2:18
Joan Baez	Blowin in the Wind	2:58
Lynard Skynyrd	Sweet Home Alabama	4:46
Michael Bolton	Georgia on My Mind	4:48

- 1 . What is the maximum number of songs she can record on the cassette? List the songs she would have to record on each side. How much wasted tape time is left?
2. What is the least number of songs Chantel could record if she used the entire cassette? List the songs she would have to record on each side. How much wasted tape time is left?

Thinking Cap

Make a cassette of your favorite songs. List the songs you would choose to put on your cassette. Give the time of each song and the total time used on each side of the cassette. You can use a 30, 60 or 120 minute tape.

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Exploring Remainders

Objective: Using the calculator to explore remainders to create whole units.

NCTM Standards: Computation and Estimation; Mathematics as Problem Solving; Mathematical Connections

Using the Activity:

Students use the calculator in this activity as a tool to solve problems involving remainders. Students should be encouraged to change the song times to seconds so that addition and division can easily take place. Using the **+R** key and dividing by 60, the students will see time as minutes and seconds.

1. 15 songs, 8 songs on one side and 7 songs on the other. The list of songs will vary. Students can use the remainder key to see how much wasted tape is left.
2. 13 songs, 7 songs on one side and 6 songs on the other. The list of songs will vary. Students can use the remainder key to see how much wasted tape is left.

Thinking Cap

All answers that can be justified are acceptable.