

THE BARBER OF SEVILLE

Rossini

Math Lesson Plan: Making a Living as a Composer

Students Will

- Study charts for information
- Complete charts with computations
- Make conversions between different currencies

Getting Ready

- Copies for each student: **Activity Worksheets 1 and 2**
- “Our Composer, Gioachino Rossini”
- Copies for the teacher: **Answers for Activity Worksheets 1 and 2**
- Pens or pencils
- Calculators

Instructional Time: One 45-minute class period

Introduction

Have the students read about the composer’s background in “Our Composer, Gioachino Rossini” thinking about the financial needs he would have had during the time in which he was composing. Ask the students to discuss expenses such as: the cost of living during the composer’s lifetime, travel expenses, medical care, etc.

Guided Practice

Give each student a copy of **Activity Worksheet 1**. Read the directions and have students calculate answers for #1 and #2 on **Activity Worksheet 1**. Assist students to make the conversions from Lire to Dollars and calculate the answers for #3 and #4.

Independent Practice

Depending on your grade level and time constraints, you may choose to have students work as a whole class, in small groups, or individually. Have students complete **Activity Worksheet 1**. Students may then complete **Activity Worksheet 2**. Give time to check answers in class.

Evaluation

1. Were students able to complete **Activity Worksheet 1**?
2. Did students discuss Rossini's financial need to write so many operas?
3. Did students complete **Activity Worksheet 2**?

If Time Allows

Have students consider the economic impact of a composer relocating to another country where the income for each performance of an opera is twice that of one of the samples given. If the income is twice as much for each performance, students may need to consider the cost of living in the other country as it may be higher than the current country.

TEKS: Math

Grade 6

- (2) Number, operation, and quantitative reasoning. B. C.
- (11) Underlying processes and mathematical tools. A.

Grade 7

- (2) Number, operation, and quantitative reasoning. A. B.
- (13) Underlying processes and mathematical tools. A.

Grade 8

- (2) Number, operation, and quantitative reasoning. A. B.
- (14) Underlying processes and mathematical tools. A.

Grades 9-12

- (1) Knowledge and skills. B. D.
- (2) Foundations for functions. C. D
- (9) Quadratic and other nonlinear functions. A. D.
- (10) Quadratic and other nonlinear functions. A.

Correlates

Music, Math

Gardner's Intelligences

Logical/Mathematical

Bloom's Taxonomy

Application, Analysis, Evaluation, Synthesis

Our Composer, Gioachino Rossini

Born: Pesaro, 29 Feb 1792

Died: Passy, 13 Nov 1868

Nationality: Italian composer

Both his parents were musicians, his father a horn player, his mother a singer. He learned the horn and singing and as a boy sang in at least one opera in Bologna, where the family lived. He studied there and began his operatic career when, at 18, he wrote a one-act comedy for Venice. Further commissions followed, from Bologna, Ferrara, Venice again and Milan, where *La pietra del paragone* was a success at La Scala in 1812. This was one of seven operas written in 16 months, all but one of them comic.

This level of activity continued in the ensuing years. His first operas to win international acclaim come from 1813, written for different Venetian theatres: the serious *Tancredi* and the farcically comic *L'italiana in Algeri*, the one showing a fusion of lyrical expression and dramatic needs, with its crystalline melodies, arresting harmonic inflections and colorful orchestral writing, the other moving easily between the sentimental, the patriotic, the absurd and the sheer lunatic. Two operas for Milan were less successful. But in 1815 Rossini went to Naples as musical and artistic director of the Teatro S Carlo, which led to a concentration on serious opera. But he was allowed to compose for other theatres, and from this time date two of his supreme comedies, written for Rome, *Il barbiere di Siviglia* and *La Cenerentola*. The former, with its elegant melodies, its exhilarating rhythms and its superb ensemble writing, has claims to be considered the greatest of all Italian comic operas, eternally fresh in its wit and its inventiveness. It dates from 1816; initially it was a failure, but it quickly became the most loved of his comic works, admired alike by Beethoven and Verdi. The next year saw *La Cenerentola*, a charmingly sentimental tale in which the heroine moves from a touching folksy ditty as the scullery maid to brilliant coloratura apt to a royal maiden.

Rossini's most important operas in the period that followed were for Naples. The third act of his *Otello* (1816), with its strong unitary structure, marks his maturity as a musical dramatist. The Neapolitan operas, even though much dependent on solo singing of a highly florid kind (to the extent that numbers could be, and have been, interchanged), show an enormous expansion of musical means, with more and longer ensembles and the chorus an active participant; the accompanied recitative is more dramatic and the orchestra is given greater prominence. Rossini also abandoned traditional overtures, probably in order to involve his audiences in the

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drama from the outset. In Naples the leading soprano was Isabella Colbran, mistress of the impresario, Barbaia. She transferred her allegiance to Rossini, who in 1822 married her; they were not long happy together.

Among the masterpieces from this period are *Maometto II* (1820) and, written for Venice at the end of his time in Naples, *Semiramide* (1823). Barbaia gave a Viennese season in 1822; Rossini and his wife returned to Bologna, then in 1823 left for London and Paris where he took on the directorship of the Théâtre-Italien, composing for that theatre and the Opéra. Some of his Paris works are adaptations (*Le siège de Corinthe* and *Moïse et Pharaon*); the opéra comique, *Le Comte Ory* is part-new, *Guillaume Tell* wholly. This last, widely regarded as his "chef d'oeuvre," and very long, is a rich tapestry of his most inspired music, with elaborate orchestration, many ensembles, spectacular ballets and processions in the French tradition, opulent orchestral writing and showing a new harmonic boldness.

And then, silence. At 37, he retired from opera composition. He left Paris in 1837 to live in Italy, but suffered prolonged and painful illness there (mainly in Bologna, where he advised at the Liceo Musicale, and in Florence). Isabella died in 1845 and the next year he married Olympe Pélissier, with whom he had lived for 15 years and who tended him through his ill-health. He composed hardly at all during this period (the "Stabat mater" belongs to his Paris years); but he went back to Paris in 1855, and his health and humor returned, with his urge to compose, and he wrote a quantity of pieces for piano and voices, with wit and refinement, that he called "Péchés de vieillesse" ("Sins of Old Age"), including the graceful and economical "Petite messe solennelle" (1863). He died, universally honoured, in 1868.

The Barber of Seville Math I: Making a Living as a Composer

Activity Worksheet 1

Directions: Study the sample budget below for a composer maintaining a middle class lifestyle in Rossini’s time. Use the Italian lira (one) and lire (more than one) and the American dollar to answer the following questions.

Sample Annual Budget

Category	Italian Lire	U.S. Dollars
Rossini’s weekly allowance (55 lire per wk X 52 wks).....	_____	_____
Meals outside the home (18 lire per wk X 52 wk)	_____	_____
Furniture.....	<u>837</u>	_____
Rent (45 lire per month X _____ months).....	_____	_____
Travel.....	<u>486</u>	_____
Coal and wood.....	<u>354</u>	_____
Household help (30 lire per month X _____ months).....	_____	_____
Gifts.....	<u>338</u>	_____
Clothing.....	<u>355</u>	_____
Composing supplies.....	<u>185</u>	_____
Medical.....	<u>224</u>	_____
Music copying.....	<u>112</u>	_____
Legal services.....	<u>50</u>	_____
Entertainment.....	<u>36</u>	_____
Insurance.....	<u>32</u>	_____
Books and newspapers.....	<u>27</u>	_____
Taxes.....	<u>34</u>	_____
Other.....	<u>322</u>	_____
 Total.....	 _____	 _____

1. Calculate the missing amounts in the first column for the Italian lire in the sample budget above.
2. What is the total amount of the household expenses for the Italian lire? _____ lire
3. Complete the second column for U.S. Dollars. If it took 15 Italian lire to equal one American dollar, calculate all categories for the sample budget in dollars. What is the total amount in dollars?
\$ _____
4. If one dollar from the time period of the chart equals \$110 today, what would the total budget for one year be in today’s dollars?
\$ _____

ANSWER KEY *The Barber of Seville* Math I: Making a Living as a Composer**Activity Worksheet 1**

Directions: Study the sample budget below for a composer maintaining a middle class lifestyle in Rossini's time. Use the Italian lira (one) and lire (more than one) and the American dollar to answer the following questions.

Sample Annual Budget

Category	Italian Lire	U.S. Dollars
Rossini's weekly allowance (55 lire per wk X 52 wks).....	<u>2,860</u>	<u>\$190.67</u>
Meals outside the home (18 lire per wk X 52 wks).....	<u>936</u>	<u>\$ 62.40</u>
Furniture.....	837	<u>\$ 55.80</u>
Rent (45 lire per month X 12 months).....	<u>540</u>	<u>\$ 36.00</u>
Travel.....	486	<u>\$ 32.40</u>
Coal and wood.....	354	<u>\$ 23.60</u>
Household help (30 lire per month X 12 months)	<u>360</u>	<u>\$ 24.00</u>
Gifts.....	338	<u>\$ 22.53</u>
Clothing.....	355	<u>\$ 23.67</u>
Composing supplies.....	185	<u>\$ 12.33</u>
Medical.....	224	<u>\$ 14.93</u>
Music copying.....	112	<u>\$ 7.47</u>
Legal services.....	50	<u>\$ 3.33</u>
Entertainment.....	36	<u>\$ 2.40</u>
Insurance.....	32	<u>\$ 2.13</u>
Books and newspapers.....	27	<u>\$ 1.80</u>
Taxes.....	34	<u>\$ 2.27</u>
Other.....	322	<u>\$ 21.47</u>
Total.....	<u>8,088</u>	<u>\$539.20</u>

1. Calculate the missing amounts in the first column for the Italian lire in the sample budget above.
2. What is the total amount of the household expenses for the Italian lire? **8,088 lire**
3. Complete the second column for U.S. Dollars. If it took 15 Italian lire to equal one American dollar, calculate all categories for the sample budget in dollars. (*Remind students when dividing the amount of lire by 15 to round up one when there is more than 5 in the hundredths place. Ex. \$2.26666 = \$2.27*)
What is the total amount in dollars? **\$539.20**
4. If one dollar from the time period of the chart equals \$110 today, what would the total budget for one year be in today's dollars? $\$539.20$ (total budget then) $\times \$110$ (dollar value today) Total budget for one year in today's dollars: **\$59,312.00**

Name _____

Date _____

***The Barber of Seville* Math I: Making a Living as a Composer**

Activity Worksheet 2

Directions: Find the totals for each of the empty blanks for the income chart. Total the income from each of the two operas, and the total income for opera writing for the year.

Sample Annual Income

Opera A

Honorarium	200 lire
Performance Fees: 22 Performances	
100 lire for each of the first 40 performances (100 X __)	_____ lire
75 lire for each additional performance (75 X __)	_____ lire
Performance fees in a second city: 48 Performances Total	
75 lire for each of the first 40 performances (75 X __)	_____ lire
50 lire for each additional performance (50 X __)	_____ lire
Total Income for Opera A	_____ lire

Opera B

Honorarium	150 lire
Performance Fees: 20 Performances	
100 lire for each of the first 40 performances (100 X __)	_____ lire
75 lire for each additional performance (75 X __)	_____ lire
Performance fees in a second city: 16 Performances	
75 lire for each of the first 40 performances (75 X __)	_____ lire
50 lire for each additional performance (50 X __)	_____ lire
Total Income for Opera B	_____ lire
TOTAL ANNUAL INCOME	_____ lire

If the composer makes the above income for a year, how much money will he have left for investment, savings, and other expenses if his total living expenses are that of **Activity Worksheet 1**?

Income:	_____ lire
Expenses:	- 8,088 lire
Remaining money	_____ lire

ANSWER KEY *The Barber of Seville* Math I: Making a Living as a Composer**Activity Worksheet 2**

Directions: Find the totals for each of the empty blanks for the income chart. Total the income from each of the two operas, and the total income for opera writing for the year.

Sample Annual Income

Opera A

Honorarium	<u>200</u> lire
Performance Fees: 22 Performances	
100 lire for each of the first 40 performances ($100 \times \underline{22}$)	<u>2,200</u> lire
75 lire for each additional performance ($75 \times \underline{0}$)	<u>0</u> lire
Performance fees in a second city: 48 Performances	
75 lire for each of the first 40 performances ($75 \times \underline{40}$)	<u>3,000</u> lire
50 lire for each additional performance ($50 \times \underline{8}$)	<u>400</u> lire
Total Income for Opera A	<u>5,800</u> lire

Opera B

Honorarium	<u>150</u> lire
Performance Fees: 20 Performances	
100 lire for each of the first 40 performances ($100 \times \underline{20}$)	<u>2,000</u> lire
75 lire for each additional performance ($75 \times \underline{0}$)	<u>0</u> lire
Performance fees in a second city: 16 Performances Total	
75 lire for each of the first 40 performances ($75 \times \underline{16}$)	<u>1,200</u> lire
50 lire for each additional performance ($50 \times \underline{0}$)	<u>0</u> lire
Total Income for Opera B	<u>3,350</u> lire

TOTAL ANNUAL INCOME 9,150 lire

If the composer makes the above income for a year, how much money will he have left for investment, savings, and other expenses if his total living expenses are that of **Activity Worksheet 1**?

Income:	<u>9,150</u> lire
Living Expenses:	- <u>8,088</u> lire
Remaining money	<u>1,062</u> lire