

Πρόβλημα 2 (50%)

Βρείτε το

$$19\frac{3}{5} - 7\frac{4}{45} - 2\frac{1}{15} =$$

αναλυτικά και να το ηχογραφήσετε στα Ελληνικά

Απάντηση:

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Table 1: Rubric

Category	4:Excels	3:Meets	2:Progressing	1:Needs Improvement
Mathematical Concepts	Explanation shows complete understanding of the mathematical concepts used to solve the problem(s).	Explanation shows substantial understanding of the mathematical concepts used to solve the problem(s).	Explanation shows some understanding of the mathematical concepts needed to solve the problem(s).	Explanation shows very limited understanding of the underlying concepts needed to solve the problem(s) OR is not written.
Mathematical Reasoning	Uses complex and refined mathematical reasoning.	Uses effective mathematical reasoning	Some evidence of mathematical reasoning.	Little evidence of mathematical reasoning.
Mathematical Errors	95-100% of the steps and solutions have no mathematical errors.	Almost all (85-94%) of the steps and solutions have no mathematical errors.	Most (75-84%) of the steps and solutions have no mathematical errors.	More than 75% of the steps and solutions have mathematical errors.
Use of Manipulates	Student always listens and follows directions and only uses manipulatives as instructed.	Student typically listens and follows directions and uses manipulatives as instructed most of the time.	Student sometimes listens and follows directions and uses manipulatives appropriately when reminded.	Student rarely listens and often "plays" with the manipulatives instead of using them as instructed.
Explanation	Explanation is detailed and clear.	Explanation is clear.	Explanation is a little difficult to understand, but includes critical components.	Explanation is difficult to understand and is missing several components OR was not included.
Neatness and Organization	The work is presented in a neat, clear, organized fashion that is easy to read.	The work is presented in a neat and organized fashion that is usually easy to read.	The work is presented in an organized fashion but may be hard to read at times.	The work appears sloppy and unorganized. It is hard to know what information goes together.
Mathematical terminology and notation	Correct terminology and notation are always used, making it easy to understand what was done.	Correct terminology and notation are usually used, making it fairly easy to understand what was done.	Correct terminology and notation are used, but it is sometimes not easy to understand what was done.	There is little use, or a lot of inappropriate use, of terminology and notation.
Strategy-Procedures	Typically, uses an efficient and effective strategy to solve the problem(s).	Typically, uses an effective strategy to solve the problem(s).	Sometimes uses an effective strategy to solve problems, but does not do it consistently.	Rarely uses an effective strategy to solve problems.
Diagrams and sketches	Diagrams and/or sketches are clear and greatly add to the reader's understanding of the procedure(s).	Diagrams and/or sketches are clear and easy to understand.	Diagrams and/or sketches are somewhat difficult to understand.	Diagrams and/or sketches are difficult to understand or are not used.

Table 2: Rubric

Category Multimedia	4:Excels	3:Meets	2:Progressing	1:Needs Improvement
Background	Background does not detract from text or other graphics. Choice of background is consistent from card to card and is appropriate for the topic.	Background does not detract from text or other graphics. Choice of background is consistent from card to card.	Background does not detract from text or other graphics.	Background makes it difficult to see text or competes with other graphics on the page.
Graphics Sources	Graphics are hand-drawn. The illustrator(s) are given credit somewhere in the presentation.	A combination of hand-drawn and stock graphics are used. Sources are documented in the presentation for all images.	Some graphics are from sources that clearly state that non-commercial use is allowed without written permission. Sources are documented in the presentation for all "borrowed" images.	Some graphics are borrowed from sites that do not have copyright statements or do not state that non-commercial use is allowed, OR sources are not documented for all images.
Sounds planning	Careful planning has gone into sounds. All sounds improve the content or "feel" of the presentation.	Some planning has gone into sounds. Most enhance the content or "feel" of the presentation, but 1-2 seem to be added for no real reason. None detract from the overall presentation.	Sounds that are chosen are appropriate for the topic, but some detract from the overall presentation.	Sounds are not appropriate for the presentation.
Text-Fonts Choice & Formatting	Font formats (e.g., color, bold, italic) have been carefully planned to enhance readability and content.	Font formats have been carefully planned to enhance readability.	Font formatting has been carefully planned to complement the content. It may be a little hard to read.	Font formatting makes it very difficult to read the material.
Spellings and Grammar	Presentation has no misspellings or grammatical errors.	Presentation has 1-2 misspellings, but no grammatical errors.	Presentation has 1-2 grammatical errors but no misspellings.	Presentation has more than 2 grammatical and/or spelling errors.
Use of graphics	All graphics are attractive (size and colors) and support the theme/content of the presentation.	A few graphics are not attractive but all support the theme/content of the presentation.	All graphics are attractive but a few do not seem to support the theme/content of the presentation.	Several graphics are unattractive AND detract from the content of the presentation.
Effectiveness	Project includes all material needed to gain a comfortable understanding of the topic. It is a highly effective study guide.	Project includes most material needed to gain a comfortable understanding of the material but is lacking one or two key elements. It is an adequate study guide.	Project is missing more than two key elements. It would make an incomplete study guide.	Project is lacking several key elements and has inaccuracies that make it a poor study guide.

Table 3: Rubric

Category	4:Excels	3:Meets	2:Progressing	1:Needs Improvement
Oral Recording				
Information	All information presented in the system was clear, accurate and thorough.	Most information presented in the system was clear, accurate and thorough.	Most information presented in the system was clear and accurate, but was not usually thorough.	Information had several inaccuracies OR was usually not clear.
Understanding of Topics	You are clearly understood the topic in-depth and presented their information forcefully and convincingly.	You are clearly understood the topic in-depth and presented their information with ease.	You are seemed to understand the main points of the topic and presented those with ease.	You are did not show an adequate understanding of the topic.
Speaks clearly	Speaks clearly and distinctly all of the time and mispronounces no words.	Speaks clearly and distinctly all of the time but mispronounces 1 or more words.	Speaks clearly and distinctly most of the time and mispronounces no words.	Does NOT speak clearly and distinctly most of the time AND/OR mispronounces more than 1 word.
Vocabulary	Uses vocabulary appropriate for the audience. Extends audience vocabulary by defining words that might be new to most of the audience.	Uses vocabulary appropriate for the audience. Includes 1-2 words that might be new to most of the audience, but does not define them.	Uses vocabulary appropriate for the audience. Does not include any vocabulary that might be new to the audience.	Uses several (5 or more) words or phrases that are not understood by the audience.
Volume	Volume is loud enough to be heard throughout the presentation.	Volume is loud enough to be heard at least 90% of the time.	Volume is loud enough to be heard at least 80% of the time.	Volume often too soft to be heard.