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| **Analyze & Interpret: Unit Circle (Trigonometry Guide)** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret **each angle, its corresponding point and its trig functions.** | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/ Instructor asks…** | \*What do you already know about special triangles?  \*What have you learned about the unit circle?  \*What do you want to know about…?  \*What can you say about…?  \*What do you think about…?  \*How would you explain…?  \*What would you use to support…?  \*What is the significance of the support?  What is valid about…?  \*What is relevant to…?  \*What has meaning for…?  \*What information is most important to know about the unit circle? | | | \*How would you best organize the information on…?  \*How would you categorize or classify the different parts of the unit circle, 4 quadrants?  \*What is the purpose or motive of memorizing the unit circle?  \*What are your assumptions about…?  \*Who, what, when, where, why and how?  *Additional Questions*:  What does the X value in the corresponding point represent? If X is Cos and Y is Sin, what is tan?  How would you use the unit circle to find the cosine of 60 degrees?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: factoring** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret **how polynomials can be broken down and manipulated.**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/ Instructor asks…** | \*What do you already know about basic multiplication?  \*What have you learned about in previous math classes?  \*What do you want to know about  \*What can you say about…?  \*What do you think about…?  \*How would you explain…?  \*What would you use to support…?  \*What is the significance of the support…?  What is valid about…?  \*What is relevant to …?  \*What has meaning for …?  \*What information is most important for…? | | | \*How would you best organize the information on…?  \*How would you categorize or classify the different parts of…?  \*What is the purpose or motive of…?  \*What are your assumptions about…?  \*Who, what, when, where, why and how? Theory, history, and person involved.  \* How could you relate factoring to real life problems? Distance, time and speed.  *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: word problems** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret **key words in order to set up and solve and translate into mathematical language.** | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \*What do you already know about the set-up?  \*What have you learned about word problems?  \*What do you want to know about applying the set-up?  \*What can you say about is the set-up valid?  \*What do you think about will it lead to a valid correlation?  \*How would you explain the problem – what we’re trying to solve?  \*What would you use to support your set-up?  \*What is the significance of the support of…?  What is valid legitimate math operations?  \*What is relevant to know about the problem?  \*What has meaning for…?  \*What information is most important for…? | | | \*How would you best organize the information on…?  \*How would you categorize or classify the different parts of…?  \*What is the purpose or motive of …?  \*What are your assumptions about…?  \*Who, what, when, where, why and how?  *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: word problems** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret word problems. | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \*What do you already know about…?  \*What have you learned about putting words into numbers?  \*What do you want to know about…?  \*What can you say about..?  \*What do you think about…?  \*How would you explain…?  \*What would you use to support…?  \*What is the significance of the support of…?  What is valid to the question asked?  \*What is relevant to what the word problem is asking?  \*What has meaning for…?  \*What information is most important to the answer? | | | \*How would you best organize the information on…?  \*How would you categorize or classify the different parts of the word problem?  \*What is the purpose or motive of…?  \*What are your assumptions about…?  \*How would you rephrase the problem?  \*How would you distinguish/separate/select relevant and irrelevant information in the problem?  \*What is the problem really asking me?  What number operation do I need to use?  *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: foiling** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret **how to use foiling and factoring.** | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/ Instructor asks…** | \*What do you already know about foiling?  \*What have you learned about the multiple ways to foil?  \*What do you want to know about…?  \*What can you say about…?  \*What do you think about…?  \*How would you explain the steps that lead to the answer?  \*What would you use to support  \*What is the significance of the support of…?  What is valid about…?  \*What is relevant to or related to foiling?  \*What has meaning for..?  \*What information is most important for…? | | | \*How would you best organize the information on  \*How would you categorize or classify the different parts of…? \*What is the purpose or motive of …?  \*What are your assumptions about…?  \*Who, what, when, where, why and how?  *Additional Questions*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: logarithms** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret **equations involving logarithms.** | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/ Instructor asks…** | \*What do you already know about solving regular algebraic equations?  \*What have you learned about the concepts of logarithms?  \*What do you want to know about…?  \*What can you say about…?  \*What do you think about…?  \*How would you explain…?  \*What would you use to support…?  \*What is the significance of the support of…?  What is valid about…?  \*What is relevant to…?  \*What has meaning for…?  \*What information is most important? | | | \*How would you best organize the information on…?  \*How would you categorize or classify the different parts of…?  \*What is the purpose or motive of …?  \*What are your assumptions about…?  \*Who, what, when, where, why and how?  \* What makes logarithm expressions different from other algebraic expressions?  *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: determining the null and alternative hypotheses** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret **a statistical word problem to determine the null hypothesis (equality) vs alternative hypothesis to be tested.** | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/ Instructor asks…** | \*What do you already know about hypothesis testing? Null vs. alternative hypotheses?  \*What have you learned about…?  \*What do you want to know about the given value?  \*What can you say about the value being tested?  \*What do you think about…?  \*How would you explain which sign you use in the null hypothesis?  \*What would you use to support your choice?  \*What is the significance of the support of…?  What is valid about…?  \*What is relevant to …?  \*What has meaning for…?  \*What information is most important to determining which signs to use for your hypotheses? | | | \*How would you best organize the information on…?  \*How would you categorize or classify the different parts of the word problem?  \*What is the purpose or motive of testing the null hypothesis?  \*What are your assumptions about…?  \*Who, what, when, where, why and how?  \* Are you testing a value related to equality? What does this tell you about the Ho? If the Ho is not a true equality, how does this change the outcome?  *Additional Questions*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| Analyze & Interpret: Polynomials  Learning Outcome 1  Students will analyze and interpret polynomials (sum of terms of the type *ax*n where n > 0 and *a* = any real number). | | |
| **When students analyze and interpret, they…** | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Articulate | Compare | Differentiate | Gather | March | Resolve | | Assemble | Contrast | Discover | Identify | Organize | Select | | Break down | Decipher | Discuss | Inspect | Outline | Separate | | Calculate | Define | Dissect | Investigate | Paraphrase | Signify | | Categorize | Detail | Distinguish | Label | Relate | Summarize | | Choose | Determine | Examine | Map | Rephrase | Understand | | Clarify |  | Find |  |  |  | | |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \*What do you already know about polynomials?  \*What have you learned about polynomials?  \*What do you want to know about the construction of polynomials?  \*How would you explain polynomials?  \*How would I categorize or classify the different parts of numbers and variables? | Additional Questions:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |

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| Analyze & Interpret: Right Triangle Problems  Learning Outcome 1  Students will analyze and interpret the ways to solve angle and length values for a right triangle. | | |
| **When students analyze and interpret, they…** | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Articulate | Compare | Differentiate | Gather | March | Resolve | | Assemble | Contrast | Discover | Identify | Organize | Select | | Break down | Decipher | Discuss | Inspect | Outline | Separate | | Calculate | Define | Dissect | Investigate | Paraphrase | Signify | | Categorize | Detail | Distinguish | Label | Relate | Summarize | | Choose | Determine | Examine | Map | Rephrase | Understand | | Clarify |  | Find |  |  |  | | |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \*What do you already know about the properties of right triangles?  \*What have you learned about using sine, cosine, and tangent?  \*What do you want to know about remembering what soh, cah, toa means?  \*What can you say about the values given to solve the triangle?  \*What do you think about when you are given one angle and one side?  \*How would you explain when a side is opposite or adjacent?  \*What would you use to support the measurement of the hypotenuse?  \*What is a valid when you are given another angle?  \*What is relevant to finding the last of the three angles?  \*What information is most important to solve for the triangle’s hypotenuse?  \*How would I categorize or classify the different parts of the triangle’s sides or angles? | Additional Questions:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |

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| **Analyze & Interpret: Least Common Multiple** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret Least common multiple | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \* What do you already know about multiples?  \* What have you learned about products?  \*How would you explain finding the least common multiple?  \* What would you use to support your answer?  \* What is the significance of the support of the result?  \* What is the relevant to finding the least common multiple?  \* What is the purpose or motive of finding a least common multiple? | | | *Additional Questions*:  How are least common multiple and greatest common factor related? How do they differ?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: Linear Equations** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret linear equations in mathematics | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \* What do you already know about solving linear equations?  \* What have you learned about linear equations?  \* What do you want to know about proper ways of solving linear equations?  \* What can you say about the difference types of linear equations?  \* What do you think about showing all steps involved in solving equations?  \* How would you explain this concept to another classmate?  \* What would you use to support learning these skills?  \* What is the significance of the support of problem solving?  \* What is valid in reaching the solution?  \* What is relevant to correct equation solving?  \* What has meaning for you?  \* What information is most important to you?  \* How would I best organize the information on paper?  \* How would I categorize of classify the different parts of solving equations?  \* What is the purpose or motive of solving linear equations?  \* What are my assumptions about the level of difficulty of linear equations? | | | \* Who, what, when, where, why and how? – Come up with the idea of setting up linear equations?  *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |
| **Analyze & Interpret: Math** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret math | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \* What do you already know about algebra or mathematics in general?  \* What do you want to know about Calculus?  \* What can you say about the use of statistical analysis?  \* What do you think about the use of mathematics in everyday life? | | | *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |

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| **Analyze & Interpret: Synthetic Division** | | | | | | | |
| Learning Outcome 1  Students will analyze and interpret the inter-related objectives in using synthetic division to find zeros, factors, intercepts? | | | | | | | |
| **When Students analyze and interpret, they …** | Articulate  Assemble  Break down  Calculate  Categorize  Choose  Clarify | Compare  Contrast  Decipher  Define  Detail  Determine | Differentiate  Discover  Discuss  Dissect  Distinguish  Examine  Find | | Gather  Identify  Inspect  Investigate  Label  Map | Match  Organize  Outline  Paraphrase  Relate  Rephrase | Resolve  Select  Separate  Signify  Summarize  Understand |
| **To help students analyze & interpret, the tutor/Instructor asks…** | \* What do you already know about intercepts, factors?  \*What have you learned about how intercepts and factors are connected?  \* How would you explain how to determine the intercepts from the factors?  \* What information is most important to finding the factors of a polynomial?  \* How would I best organize the information on dividing a polynomial vs. finding a factor? | | | *Additional Questions*:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | | |