| | MONDAY (A) 10:44 – 11:40 | TUESDAY (B) 10:44 – 11:40 | WEDNESDAY (A) 10:44 – 11:40 | THURSDAY (B) 10:44 – 11:40 | FRIDAY (C) 9:51 – 10:31 |
|---|---|---|---|---|---|
| **P** | Objective(s): Students will be able to solve logarithmic equations using the properties of logarithms and check for extraneous solutions.<br><br>==Work Day== | Objective(s): Students will be able to solve logarithmic equations using the properties of logarithms and check for extraneous solutions.<br><br>==Work Day== | Objective(s): Students will be able to understand the definition of natural log, apply all the properties of log to natural log expressions, and solve the equations with natural logs. | Objective(s): Students will be able to understand the definition of natural log, apply all the properties of log to natural log expressions, and solve the equations with natural logs. | Objective(s): Students will be able to understand the definition of natural log, apply all the properties of log to natural log expressions, and solve the equations with natural logs.<br><br>==Work Day== |
| | **Engage**<br><br>Students will work on the the warm up which has two questions about changing log form to exponential form and condensing log equations | **Engage:** | **Engage**<br><br>Students will work on the warm up which contains solving two log equations. | **Engage**<br><br>Students will work on the warm up which contains interchanging natural log forms and exponential forms. | **Engage** |

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| **L**<br><br><br><br><br><br>**A** | **Explore**<br><br>Students will learn the one on one property and how to rewrite the log equation into an exponential equation to solve the unknown.<br><br>**Explain**<br><br>After introducing the methods, the teacher will go through 3 sample questions for both methods so that they can understand better.<br><br>**Elaborate**<br>The teacher will go through one more question which can be solved but not a real solution to remind students to always check the validity of the answer. | **Explore**<br><br><br>**Explain**<br><br><br>**Elaborate** | **Explore**<br><br>Students will try to find the number, e, through the compound interest formula. The goal is that the number, e, exists for a reason, which makes the natural log special.<br><br>**Explain**<br><br>After the exploration, the teacher will introduce the natural log, stressing that what is so special about the natural log is just about the base.<br><br>**Elaborate**<br><br>The teacher will go through how to interchange natural log forms and exponential forms. | **Explore**<br><br>Students will try to condense or expand natural log firms on their own. They will make mistakes, but they will try to apply log properties on their own.<br><br>**Explain**<br><br>The teacher will stress that natural log is not a "new thing". It is only a special log which follows the rules of all logs. Then the teacher will go over the sample questions.<br><br>**Elaborate**<br><br>Students will then use the properties to solve natural log equations. The teacher will go over some sample questions. | **Explore**<br><br><br>**Explain**<br><br><br>**Elaborate** |
| **N** | **Evaluate and Summary**<br>It is a work day tomorrow, and students will be assessed by the worksheet. | **Evaluate and Summary** | **Evaluate and Summary**<br><br>They will be an exit ticket to check their understanding. | **Evaluate and Summary**<br><br>They will be an exit ticket to check their understanding. | **Evaluate and Summary**<br><br>There would be a work day on the following Monday. |
| **Resources:** | W Section 6.4 log equa… | W 6.4Log_Equations_Questi… | W Section 6.5 Natural Log a… | W Section 6.5 Natural L… | |