

Ten Minutes to Better Troubleshooting

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Overview

Ten Minutes to Better Troubleshooting

- Don't try to fix it, just try to narrow it down
- Ask: How can I narrow it down just one more time?
- Measure more, think less
- Evaluate the Quadruple Tradeoff
- Maintain a productive attitude
- Understand intermittents

Don't Try to Fix It, Just Try to Narrow It Down

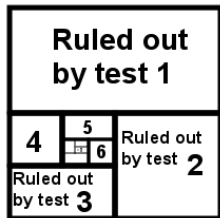
- Philosophy most predictive of troubleshooting success
- Basketball, hockey, sales, dating analogies
- How do I implement this in real time? ...

Ask: How Can I Narrow It Down Just One More Time?

- This is how you implement the Troubleshooter's Philosophy
- Repeat this mantra whenever you get stuck

Measure More, Think Less

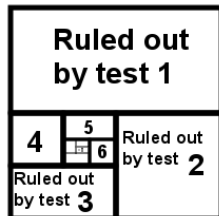
- How many thoughts can you juggle at one time?
- Brute force diagnosis fails
- Use diagnostic test based Divide and Conquer
 - AKA Half Splitting
 - AKA Binary Search
 - AKA Process of Elimination



Evaluate the Quadruple Tradeoff

Divide and Conquer for the Real World

- Even divisions
- Likelihood
- Ease
- Safety



Maintain a Productive Attitude

- Don't panic
- Don't get mad
- Test all assumptions
- Maintain confidence
- Don't be arrogant

Understand Intermittents

- Intermittent when the answer to the following question is "No":

Do you **know of a procedure to **consistently** reproduce this symptom?**

- Intermittents require their own special tactics

Summary

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