

Sustainable Thinking Transformation

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Presented by

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Agenda

- Introductions
- **Red Pen Company** – **Blue Pen Company** Exercise
- Group Exercise #1
- Break
- Thinking About Thinking
- Group Exercise #2

Red Pen Company –
Blue Pen Company Exercise

Trip Report

Blue Pen Company	Red Pen Company

Group Exercise #1

Questions

- *What is the thinking about thinking in both organizations?*
- *What does sustainability mean in both organizations?*
- *What are the obstacles to sustainability in both organizations?*

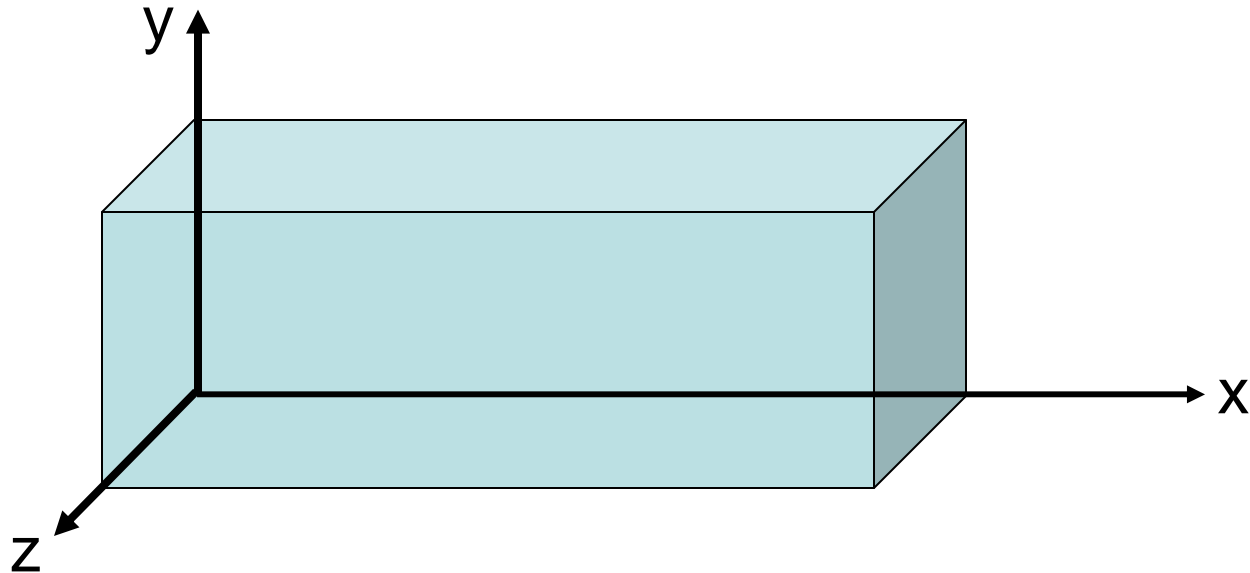
Break

Thinking About Thinking

3-D Diffusion Equation

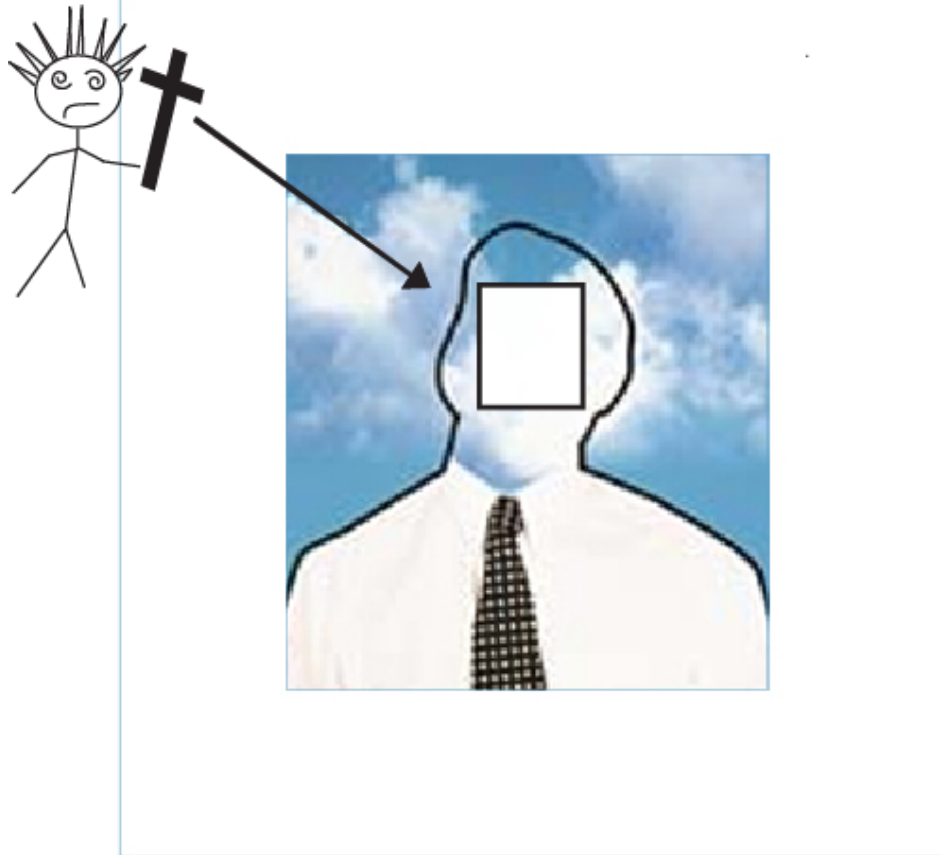
of Heat

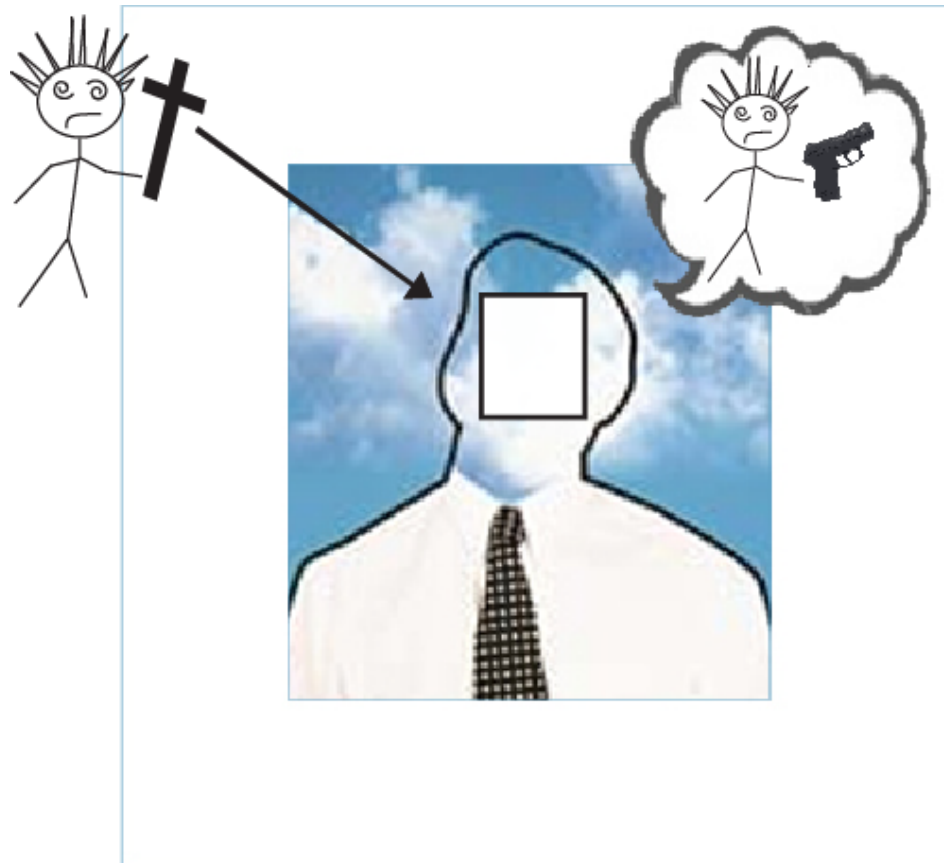
$$\frac{\partial^2 T}{\partial x^2} + \frac{\partial^2 T}{\partial y^2} + \frac{\partial^2 T}{\partial z^2} + \frac{Q''''}{k} = \frac{1}{\alpha} \frac{\partial T}{\partial t}$$

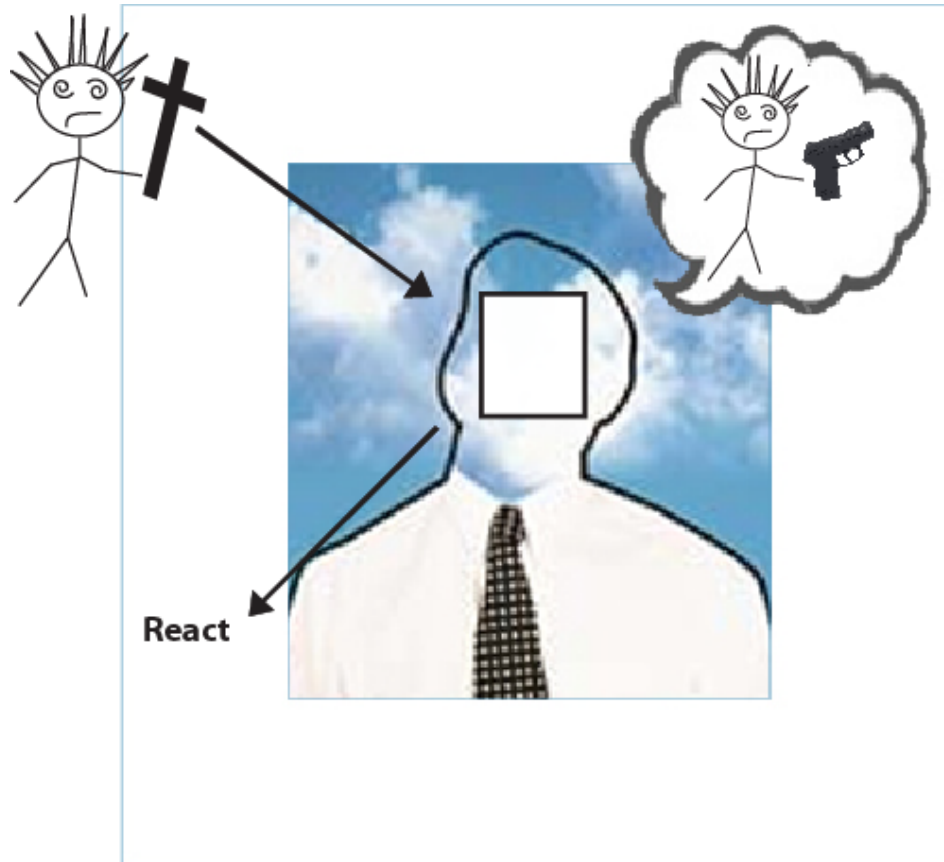


**Thinking and the problem of
perception**

**Mental models and the crazy
man**







So what's going on?

Why do we perceive what we do?

Different needs/goals

Different information

Different interpretation, language, meaning

but in the end it all comes down to...

Different mental models, which includes beliefs, values, assumptions, experiences

Some facts about **mental models**

Everybody's got them

Most people are completely unaware they have them

They are what actually dictate our actions (**theory in use**)

But most people have other explanations for their actions
(**espoused theory**)

How we talk about our actions

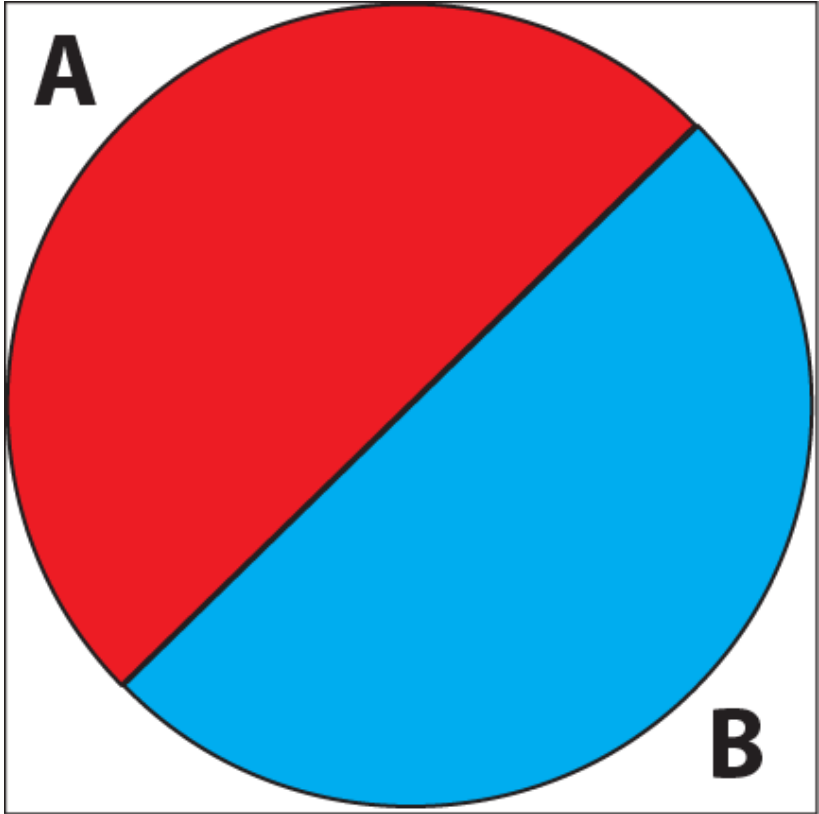
What we want others to think

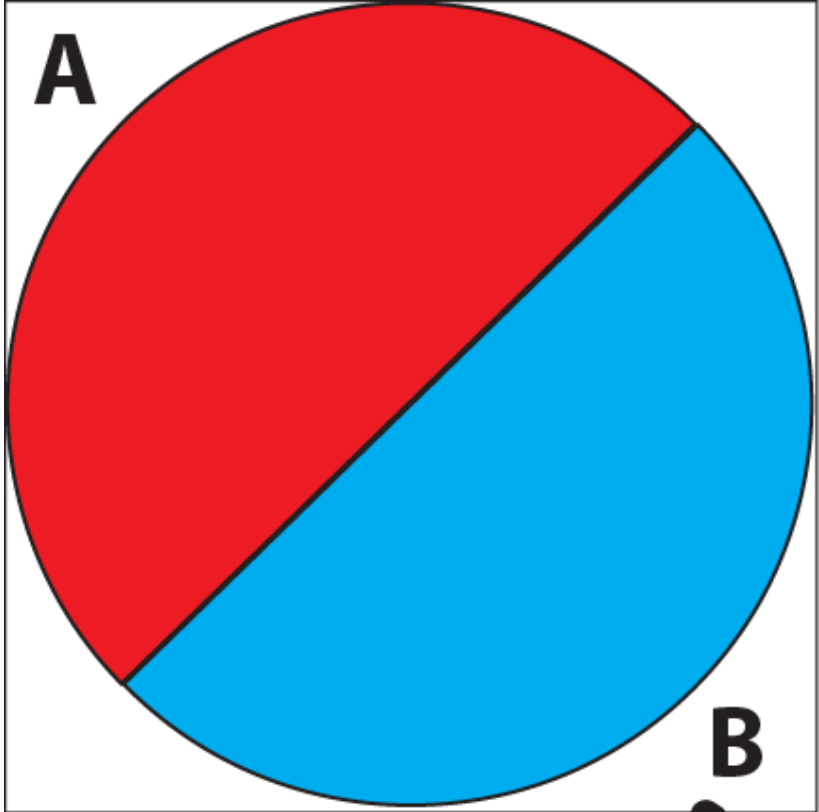
It's the answer to, "What would you do if..."

*The closer our **theory in use** aligns with our **espoused theory**,
the better our thinking will be!*

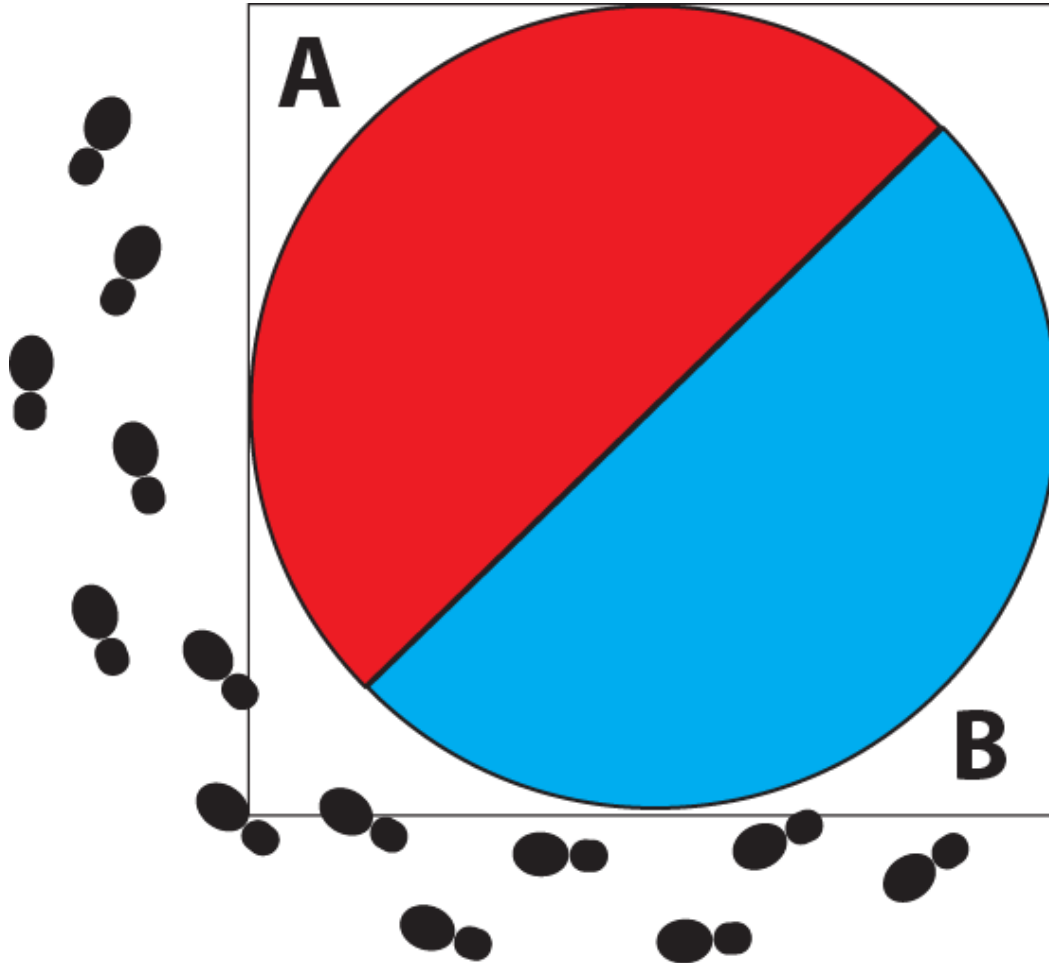
Intent/willingness

**How much of the truth do we
really want to “see”?**

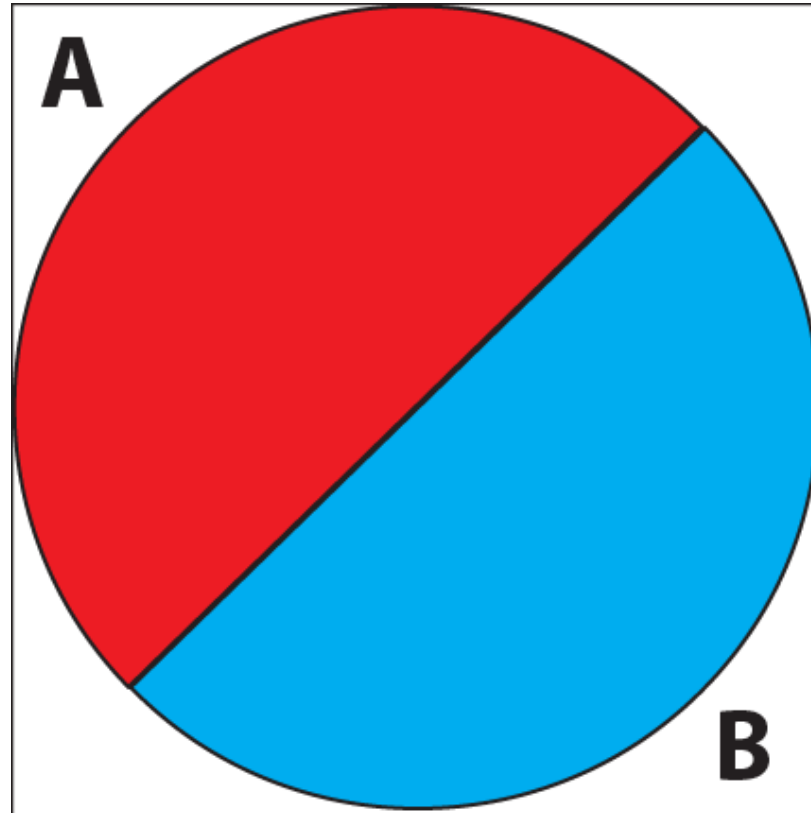




Ask: What am I NOT seeing.



The only thing I can be certain of is *this is the way I perceive it.*



It's always
BOTH.

It's never
EITHER / OR.

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Why do we “intend” not to change our thinking?

Our attitudes trump our ability to “see”

Our willingness is not to “look” through the other’s window

We have a need to validate our own mental model

Question your thinking first
...then

Question your thinking first

...then

Question some more

Question your thinking first
...then
Question some more

Nice idea, but what does it take in order to be able to question?

Thinking in a **Red Pen Company** vs. a **Blue Pen Company**

How we handle problems and decisions:
Single vs. **Double** Loop Thinking

Single Loop Thinking

When errors are detected solutions are found within the existing framework and mental model: rules, norms, beliefs, assumptions and strategies

All of these are taken for granted; questions “things”

Investigation seeks to **confirm** what we think we know

Argyris & Schon, 1974

Double Loop Thinking

When errors are detected the underlying framework and mental models are challenged.

We question the rules, norms, beliefs, assumptions and strategies, that got us to this place.

Investigation seeks to **disconfirm** what we think we know.

Argyris & Schon, 1974

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Effects of **Single** Loop Thinking on Organizations

Inhibits flow of important information, just when that information is needed most

Poor information leads to poor decisions

Perpetuates and aggravates unwanted conditions

Learning is seriously impaired

Argyris & Schon, 1974

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Cultural Markers of **Single** Loop Thinking

Win, do not lose

Save face, avoid embarrassment

Suppress negative feelings

Purport to be rationally motivated

Discourage inquiry, e.g., “Let’s not talk about the past.”

Ambiguous language, e.g., “You’re not a team player.”

Arguments not backed with observable data

Discourage conflicting views

No public testing of ideas and assumptions

Cultural Markers of **Single** Loop Thinking

Resulting in

- Defensiveness
- Blame
- Low freedom of choice
- Reduced flow of valid information
- Reduced creativity and production of novel ideas
- Learning is highly unlikely
- Repetition of errors
- The **illusion** of control

Cultural Markers of **Double Loop** Thinking

Free sharing of relevant information

Negative feelings seen as an opportunity to communicate

Shared control

Clear language grounded in observable data, e.g., “Your report has been late three times this month.”

Conflicting views encouraged

Transparency of thinking; public testing of ideas

Freedom of choice

Cultural Markers of **Double Loop** Thinking

Resulting in

- Minimal defensiveness
- Minimal blame
- High freedom of choice and action
- Information highly accessible
- Reduced creativity and production of novel ideas
- Learning is likely
- Errors are likely to be non-repetitive

Virtues of a Better Thinker

Humility

Virtues of a Better Thinker

Humility

Curiosity

Virtues of a Better Thinker

Humility

Curiosity

Courage

Virtues of a Better Thinker

Be **humble**. Realize you may not know everything that's going on

Be **curious**. Knowing that you don't know, have the desire to find out

Be **courageous**. Act according to what you find out

*The purpose of listening is to **understand**
not to see where you agree or disagree*

3-D Diffusion Equations

of Heat

$$\frac{\partial^2 T}{\partial x^2} + \frac{\partial^2 T}{\partial y^2} + \frac{\partial^2 T}{\partial z^2} + \frac{Q''''}{k} = \frac{1}{\alpha} \frac{\partial T}{\partial t}$$

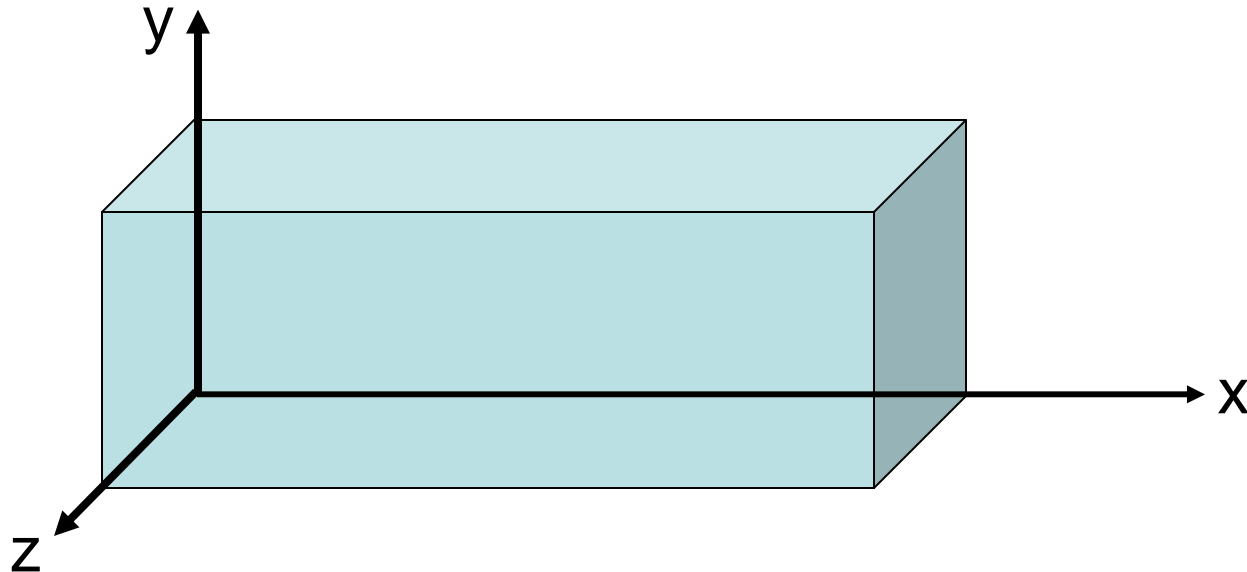
of InThinking

$$\frac{\partial^2 \ln T}{\partial x^2} + \frac{\partial^2 \ln T}{\partial y^2} + \frac{\partial^2 \ln T}{\partial z^2} + \frac{\ln T''''}{k} = \frac{1}{\alpha} \frac{\partial \ln T}{\partial t}$$

3-D Diffusion Equation

of InThinking

$$\frac{\partial^2 \ln T}{\partial x^2} + \frac{\partial^2 \ln T}{\partial y^2} + \frac{\partial^2 \ln T}{\partial z^2} + \ln T''''/k = 1/\alpha \frac{\partial \ln T}{\partial t}$$



Group Exercise #2



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Additional Information

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