

**Chapter 3: Meaning**

1. The chapter claims that mathematical ideas are metaphors. What's a mathematical idea you've seen in more than one situation? How has the meaning of that idea become clearer and richer by seeing it in different situations?
2. Give an example from your own experience of how abstraction can enrich the meaning of an idea, mathematical or otherwise.
3. Give an example from your own experience of how a story has added meaning to some idea.
4. Choose a quotation from the chapter that stood out to you, and explain what about it struck you.

**Chapter 4: Play**

1. Think of an activity that you associate with play, and make a list of all the things you enjoy about the playfulness of that activity. What analogies can you see between the things on your list and mathematical activities?
2. Some people seem to have a deep reservoir of patience and hopefulness when trying to solve a problem, leading them to continue thinking about the problem for a long time. Other people seem to give up almost immediately. How can math play build up hopefulness and patience? Compare this to the discipline required to learn a sport or instrument.
3. Math play "asks you to change perspective, to look at a problem from different viewpoints." In what ways is this virtue useful in life?
4. What role does play have in the life of a follower of Jesus?