

# Integration of Christian Perspective into Math Teaching

Compiled by Dan Beerens, Holland Christian Schools

- Mathematics helps us see the order and beauty of God's creation and thus of God himself. Hence, mathematics derives its purpose, meaning, and value from God. Classes should discuss these themes.
- Teachers should enjoy mathematics, receive it gladly and thankfully as God's gift, and cultivate a classroom climate in which students enjoy it and want to do it.
- Students need to be shown explicitly how mathematics fits into our God-given stewardship of the earth and into the building of human communities. This includes showing both examples of ways mathematics has been used to further God's purposes and ways in which it has been misused.
- For much of the twentieth century, mathematics was dominated by an abstract approach devoid of context. By contrast, a Christian approach says that mathematics is not autonomous. Thus teaching needs to be contextual – it needs to establish clear connections with other subjects and areas of practical life.
- Unlike the Greeks and their intellectual descendants, we do not despise the physical and glorify the mental and abstract. Rather, we value our bodies as God's creation. Thus, we should, as much as possible, use teaching methods that actively engage students' minds *and* bodies – for instance, by using manipulatives and having students collect and analyze data.
- We need to discuss in our classes how our surrounding cultures view mathematics and how a Christian perspective differs. For example, until fairly recently, the USA and Western Europe overemphasized human reason. Now these cultures have swung in the other direction, tending to undervalue reason and overemphasize intuition. Both Western and Asian countries today tend to value mathematics for economic gain without locating it in the broader context of Godly service.
- Students often look upon mathematics simply as recipes for how to do the problems; we need to foster an attitude of deeper reflection on what mathematics can and cannot do for us, on the wonder of this gift of God to us, and on what its order and beauty tell us about God and his creation.

*-above material from the Kuyers Institute Integrating Faith and Math Project, unpublished material still in process, James Bradley, director.*

Overarching faith perspective questions - could apply at any grade

1. How can we use math as a tool to learn about God and creation?
2. How does math help us praise God?
3. How does math help us know how to make the world a better place – to bring restoration (creation-fall-restoration/renewal)?
4. How can math help us test our ideas about the world and how it works?

5. How is math a language and how are numbers part of that language?
6. How is math the "alphabet with which God has written the universe?"(Galileo)
7. How are math and Christ related? ("All things cohere in Christ - Colossians and coherence in math - God claims the beauty and purpose of math (for his glory) – the truth of math precedes from God's character
8. How is math a tool for redemptive use by Christians as opposed to how it may be used for manipulation or selfish gain? How does our culture misuse math on a personal and societal level?
9. How can math direct us toward the Creator rather than the created? (Divine, absolute Truth vs. utility)
10. How does math enhance our understanding and awe of our Creator?

### **The Bible on Mathematics**

(from Integrating Faith + Math by David J. Huizenga, Christian School Teacher, Spring 2000.)

The following passages yield a solid footing for the math classroom.

John 1:1-3, 9-10

- Like all things created, mathematical order has its source in Christ.
- The Word gives light to everyone (secular mathematics recognizes order and pattern), but the world does not recognize the true Light (the Source and Purpose of mathematics).

Romans 1:18-21

- God has made it plain; mathematical knowledge is given by God.
- The world knows mathematics but does not glorify God with it.

Psalm 19:1-4

- Mathematics is general revelation.
- As a universal language, it is a unique cross-cultural witness.

Hebrews 1:1-3

- Christ is not only the source but also the heir of mathematics (the limit, the domain and the range).
- Christ is also the Sustainer, the present-tense coherence of all mathematics.

Colossians 1:15-17

- As Christ is the embodiment of the invisible God, so the application of mathematical principle (invisible) must be Christ-like (redemptive).
- The coherence of mathematics in Christ is a universal counter to entropy.