

GEOMETRY - THE FOURTH DIMENSION - VIDEO ASSIGNMENT

DIRECTIONS: Read over these questions before watching the film on the fourth dimension. As you watch the video of Dr. Edward Burger of Williams College explaining the fourth dimension, keep the following questions in mind, and fill in the answers as you hear them - or after the video if necessary. **Write neatly, using complete sentences in your answers - not just bullet points.** If you wish to watch the clip again, it is at: http://www.baylor.edu/player/index.php?id=100412&gallery_id=4627

1) What do mathematicians do when they run into a hard problem?

2) What benefits would there be for surgery in being able to access the fourth dimension?

3) List two other things you could do in the fourth dimension that are not possible in the third dimension. **Answer briefly, yet fully, using specific examples from the video.**

4) In the works of art that Dr. Burger shares at the end of his lecture what ideas have painters been able to represent using the fourth dimension? **Answer briefly, yet fully, referencing specific artists and works of art from the video.**

5) Dr. Burger explains the fourth dimension, but he says this isn't *really* what his talk is about. What does he say his talk is actually about?