40 Billion Dollars?

Over the past weeks we have been inundated with numbers—in the newspaper, on the radio, and on TV. You know that the US has appropriated 40 billion dollars to fund the recovery effort and defense of our homeland. The airline industry is looking for over 20 billion dollars to save them from bankruptcy. But do you really know how much a billion is?

- X If you traveled 1 billion seconds into the past, the year would be 1970!
- **X** If we traveled back in time 40 billion seconds, it would be the year 732.
- X If you owed 1 billion dollars, interest free, it would take 50 years of payments at \$38 each *minute* to pay it off.
- X If you were given a billion dollars in \$1 bills, it would take over 15 years to count non-stop.
- X That same billion dollars would weigh over 1,020 tons and stack almost 68 miles high.
- X If you lined up those billion dollars end to end they would circle the Earth almost 4 times.
- * What happened 1 billion minutes ago? The year was 98AD—about the time that John was on the island of Patmos.

Numbers don't have to be massive in order to take your breath away. The following numerals are much smaller than a billion, but much, much harder to comprehend:

- **X** 62 countries lost citizens in the attack on the World Trade Center.
- **★** 189 people are dead at the Pentagon.
- **×** 266 people died on the hijacked airplanes.
- **★** 5,422 people are still missing in the World Trade Center wreckage; 218 have been confirmed dead.
- ➤ President Bush activated 35,000 military reservists on September 17th.
- X Online donations toward the relief effort have topped 55 million dollars.

This will be a monthly column dealing with current issues in mathematics. Next month: "Heuristics: Solving the Problem." Please e-mail us (Peter and Bethany Barnosky) with questions, comments, or topics for future columns: brb@webthunder.com. All attack statistics listed are from FOXNews and MSNBC, and are accurate as of September 18, 2001. Thanks to the Bureau of Engraving & Printing, www. moneyfactory.com. [October 2001]