

Waves Win

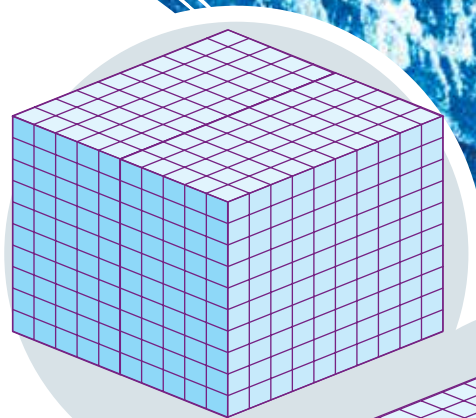
You need place value blocks or multilink cubes

Activity

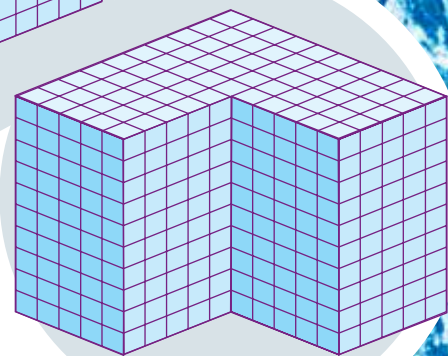
When land is reclaimed from the sea, huge concrete blocks are used to protect it from the waves.

Over time, the sea erodes these blocks so that only a part of them remains.

For example, these diagrams show 5 years' erosion on a concrete block. (Of course, most blocks would not erode quite as evenly as the ones in these diagrams.)



Before (1.000)



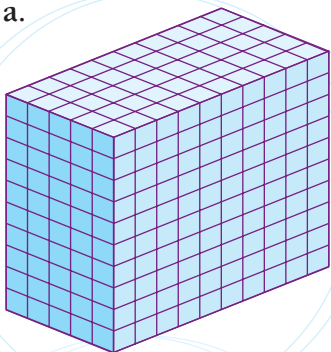
After (0.750)

1. a. What do the Before and After decimal numbers mean?
b. Write 0.750 as a fraction.
2. Here are some other eroded blocks.

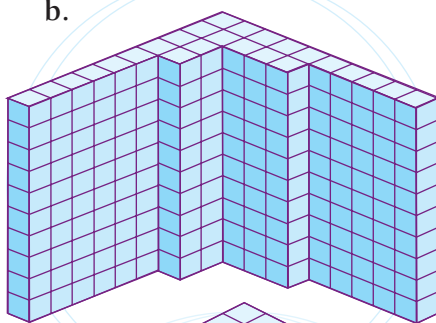
Find the decimal number for each eroded block.
Write your answers with three decimal places.

You may need to build each block with place value blocks first.

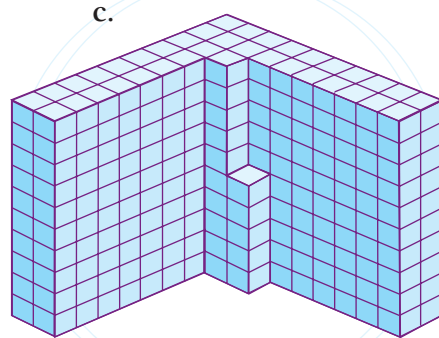
a.



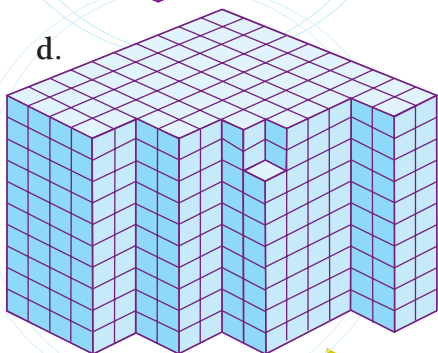
b.



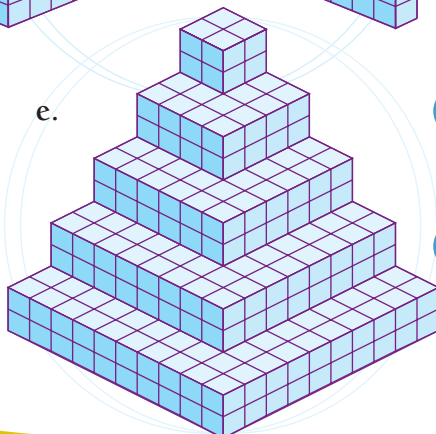
c.



d.



e.



3. What is the simplest fraction you can write for each block in question 2?

4. Use place value blocks to make models for these decimals:
a. 0.400 b. 0.660
c. 0.700 d. 0.999