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1. Find the volume of the rectangular prism.

The volume is $4,410 \mathrm{yd}^{3}$.

2. A basketball has a diameter of nine inches. What is the volume of the basketball?

The volume of the basketball is about 381.51 cubic inches.
3. A circular swimming pool has a diameter of 12 ft . If the pool is four feet high, what is the volume of the swimming pool?

The volume of the pool is about $452.16 \mathrm{ft}^{3}$.
4. Find the volume of the swimming pool above in cubic yards.

The volume is about $16.75 \mathrm{yd}^{3}$.
5. Find the value of $x$ so that the rectangular prisms have equal volumes.


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x=4
$$

6. A cylindrical vase is eight inches tall and has a radius of three inches. Water is poured into the vase to within one inch of the top of the vase. How many cubic inches of water are in the vase?

The vase contains about 197.82 cubic inches of water.

