

Grade 8

EXTRA CHALLENGES - SET VII

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1. You bought 10 stocks of UWU for \$50 each. In the first month the value of the stock lost 10% and in the second month it gained 20%. Finally in the third month it gained 30%. How much money have you made?
2. A balloon is inflated to a radius of 10 cm. If 1 litre of air is removed, what is the radius of the balloon now?
3. The Popcorn Factory, located in Lake Forest, Illinois, created the largest ball of popcorn with a circumference of approximately 7.5 metres and a mass of 1550 kg. If the volume of a single piece of popcorn is roughly 3.5 cm^3 , how many pieces of popcorn did this ball contain?

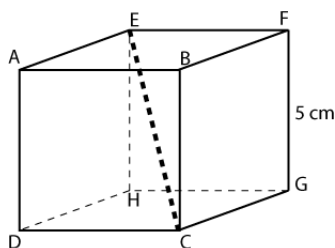


Did You Know?

One cup of unpopped corn yields 36 cups of popped corn
Now that's a lot of popcorn!



4. The conductor of the school band is counting his players. Exactly half of the band plays a stringed instrument. Violins make up one quarter of the string section. One third of this group can play in the violin's highest octave. Your friend and you are the only people who can play in the highest octave on the violin. How many members does the band have?
5. In the diagram a cube has edges of length 5 cm. What is the distance from C to E ?



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