

Each year the price of a car decreases by 15%. In 2004 a new car is bought for \$24,000. What will be the value of the car in 2007? Show your work.

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25% of the geometry students in a class are 9th graders, the rest are 8th graders. In the 1st semester, 80% of the 8th graders passed and 60% of the 9th graders passed. In the second semester 60% of the 8th graders passed, while 50% of the 9th graders passed. If there are 150 8th graders, what is the highest numbers of 9th graders who could have passed both semesters of geometry? Show your work.

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A cube with faces numbered 10 through 15 is rolled 200 times. About how many times would you expect to roll a multiple of 4?

- a. 50
- b. 70
- c. 80
- d. 90

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The symbols \$, #, *, and % all represent different positive integers. List the four symbols from least to greatest. Explain your reasoning.

$$\text{\$} + \text{\$} < \text{\#}$$

$$\text{*} + \text{\$} < \text{\%}$$

$$\text{*} + \text{\#} = \text{\$} + \text{\%}$$

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Craig has a total of 256 points on three algebra tests. His score on the first test is 6 greater than his score on the second test. His total score before taking the third test was 164 points. What were Craig's scores on the three tests? Justify your answer.

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The NFL football concession stand is going to discount the price of either hotdogs, pop corn or candy. They want to decide which of the three options the customers would prefer. What would be the best way to gather this information?

- a. Conduct a survey as fans come into the stadium.
- b. Randomly ask customers as they pay for their purchases.
- c. Have customers fill out a survey when they enter the concession stand area.
- d. Conduct a random phone survey of ticket holders.

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