

Grade 7

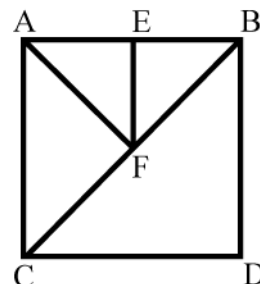
EXTRA CHALLENGES - SET II

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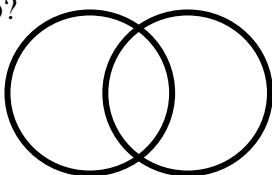
1. Marcy buys a new backpack that costs \$21.08 with tax. If she gives the cashier \$22.00 and receives 8 coins back, what could these be?

2. Line CB connects two opposite vertices of a square. The points E and F are midpoints of AB and CB, respectively. What is the ratio of the triangle FEB to the whole square?



3. Mr. Venn's class had 32 students. 19 students joined the math club, while 17 joined the reading club. If 4 students didn't join either club, how many students were only in the math club?

Check using this Venn diagram



4. It takes Jim one hour to drive 65 km from home to work every morning. He spends 30 minutes driving on the highway, 20 minutes driving on city roads and 10 minutes driving on country roads. If he drives at the same speed on the country roads and the city roads, and travels 5 km on the country road, what is his average speed in km/h, on the highway?



5. Elaine and Daniel are playing Scrabble together. Each player starts with 7 letters out of the original 100 tiles in the bag. For each letter you use to create a word, you receive a random tile from the bag. The game continues with the players taking turns creating words until all the letters are used. If Daniel always uses 3 fewer letters than Elaine uses, what is the minimum number of words that can be on the board?

Did You Know?

The word "twelve" is the only number in Scrabble in which its point value is the same as its numerical representation.



Don't forget to try these past contests! Go to www.wiredmath.ca for the link.



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http://www.cemc.uwaterloo.ca/contests/past_contests.html#gauss