

**MASSACHUSETTS MATHEMATICS LEAGUE  
NOVEMBER 2005  
ROUND 2 ALGEBRA 1 ANYTHING**

**ANSWERS**

A) \$ \_\_\_\_\_

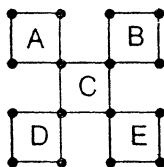
B) \_\_\_\_\_

C) \_\_\_\_\_

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- A) The Arts Fund raised money by investing part of \$30,000 in stocks paying 9% annual interest and the rest in safer bonds paying 8% annual interest. How much was invested in bonds if they made \$2,500 in interest in one year?**

- B) The pattern below is superimposed over five dates on a monthly calendar. The total of dates covered is 70; A covers a Thursday date. Determine the ordered pair (p,q) where p denotes the center date (covered by C) and q is the day of the week (SUN MON TUE WED THU FRI SAT) on which the first of the month falls.**



- C) The sum of the digits of a 3-digit number is 14. The ten's digit is four less than the sum of the other 2 digits. If the ten's digit and unit's digit are interchanged the number's value is decreased by 18. Find the number.**