

MASSACHUSETTS MATHEMATICS LEAGUE
CONTEST 5 – FEBRUARY 2008
ROUND 4 ALG 1: WORD PROBLEMS

ANSWERS

A) _____

B) _____ %

C) _____ oz.

- A) 35 students registered for enrichment courses in a summer program at Brewster Academy. Here is registration information for the science courses.

<u>Course</u>	<u># students registered</u>
Biology	19
Chemistry	17
Physics	11
Chemistry and Physics	5
Biology and Physics	7
Biology and Chemistry	12
All 3 courses	2

How many of the 35 students did not register for any of these science courses?

- B) Three men work at equal rates work 8 hours per day. If they complete 80% of a job in four 8-hour days, what percent of the job would be completed by one of these men in 6 hours?

- C) A supply of cylinders of equal but unknown mass are available and used as follows:
8 cylinders in pan *A* balance a single 9 oz. cube in pan *B*.
A single 25 oz cube in pan *A* balances 2 cylinders in pan *B*.
How much (in ounces) does each cylinder weigh?
Note that the fulcrum is not at the midpoint of \overline{PQ} .

