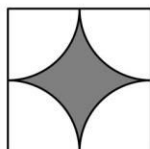


AMC 12/AHSME

2005

B

- 1 A scout troop buys 1000 candy bars at a price of n ¢ for \$2. They sell all the candy bars at a price of two for \$1. What was their profit, in dollars?
(A) 100 (B) 200 (C) 300 (D) 400 (E) 500
- 2 A positive number x has the property that $x\%$ of x is 4. What is x ?
(A) 2 (B) 4 (C) 10 (D) 20 (E) 40
- 3 Brianna is using part of the money she earned on her weekend job to buy several equally-priced CDs. She used one-fifth of her money to buy one-third of the CDs. What fraction of her money will she have left after she buys all the CDs?
(A) $\frac{1}{5}$ (B) $\frac{1}{3}$ (C) $\frac{2}{5}$ (D) $\frac{2}{3}$ (E) $\frac{4}{5}$
- 4 At the beginning of the school year, Lisa's goal was to earn an A on at least 80% of her 50 quizzes for the year. She earned an A on 22 of the first 30 quizzes. If she is to achieve her goal, on at most how many of the remaining quizzes can she earn a grade lower than an A?
(A) 1 (B) 2 (C) 3 (D) 4 (E) 5
- 5 An 8-foot by 10-foot floor is tiled with square tiles of size 1 foot by 1 foot. Each tile has a pattern consisting of four white quarter circles of radius $\frac{1}{2}$ foot centered at each corner of the tile. The remaining portion of the tile is shaded. How many square feet of the floor are shaded?



- (A) $80 - 20\pi$ (B) $60 - 10\pi$ (C) $80 - 10\pi$ (D) $60 + 10\pi$ (E) $80 + 10\pi$
- 6 In $\triangle ABC$, we have $AC = BC = 7$ and $AB = 2$. Suppose that D is a point on line AB such that B lies between A and D and $CD = 8$. What is BD ?
(A) 3 (B) $2\sqrt{3}$ (C) 4 (D) 5 (E) $4\sqrt{2}$
- 7 What is the area enclosed by the graph of $|3x| + |4y| = 12$?
(A) 6 (B) 12 (C) 16 (D) 24 (E) 25