

UB SAT 2009  
Homework #15  
Plugging-In the Answer  
*Due: Thurs, Apr 23*

1. If  $x$  is a positive integer, and  $x+12 = x^2$ , what is the value of  $x$ ?

- (A) 2      (B) 4      (C) 6      (D) 8      (E) 12

2. If twice the sum of three consecutive numbers is 12, and the two lowest numbers add up to 3, what is the highest number?

- (A) 2      (B) 3      (C) 6      (D) 9      (E) 12

3. If  $2^x = 8^{(x-4)}$ , then  $x =$

- (A) 4      (B) 6      (C) 8      (D) 9      (E) 64

4. If Jane bought 3 equally priced shirts on sale, she would have 2 dollars left over. If instead she bought 10 equally priced pairs of socks, she would have 7 dollars left over. If the prices of both shirts and socks are integers, which of the following, in dollars, could be the amount that Jane has to spend?

- (A) 28      (B) 32      (C) 47      (D) 57      (E) 60

5. During a vacation together, Bob spent twice as much as Josh, who spent four times as much as Ralph. If Bob and Ralph together spent \$180, how much did Josh spend?

- (A) \$20      (B) \$80      (C) \$120      (D) \$160      (E) \$180

6. Tina has half as many marbles as Louise. If Louise gave away 3 of her marbles and lost 2 more, she would have 1 more marble than Tina. How many marbles does Tina have?

- (A) 2      (B) 3      (C) 5      (D) 6      (E) 7

7. In a bag of jellybeans,  $\frac{1}{3}$  are cherry and  $\frac{1}{4}$  are licorice. If the remaining 20 jellybeans are orange, how many jellybeans are in the bag?

- (A) 12      (B) 16      (C) 32      (D) 36      (E) 48