

## EXIT TICKET

### Question 1

The perimeter of a particular rectangle is 60 inches. The longer sides of the rectangle are each 6 inches longer than each of the shorter sides of the rectangle. What is the length, in inches, of one of the longer sides of this rectangle?

- (A) 12
- (B) 15
- (C) 18
- (D) 30
- (E) 48

### Question 2

Given that  $\angle B$  is the included angle between the two congruent sides of the isosceles triangle  $\triangle ABC$ , and the measure of  $\angle B$  is  $30^\circ$ , what is the measure of  $\angle A$ ?

- (F)  $30^\circ$
- (G)  $30^\circ$
- (H)  $75^\circ$
- (J)  $120^\circ$
- (K)  $150^\circ$

### Question 3

The total amount of a certain substance present in a laboratory experiment is given by the formula

$A = A_0(3^{2t})$ , where  $A$  is the total amount of the

substance  $t$  minutes after an initial amount,  $A_0$ , of the substance began accumulating. Which of the following equations relates the number of minutes it will take an initial amount of 15 grams of this substance to accumulate to 95 grams?

- (A)  $A = 95(3^{2(15)})$
- (B)  $15 = 95(3^{2t})$
- (C)  $95 = 15(3^{2t})$
- (D)  $A = 15(3^{2(95)})$
- (E)  $95 = 80(3^{2t})$

### Question 4

Johnny approaches a detour for the westbound lane of Interstate-40. Usually, he drives this section of I-40, which is a straight road that runs east and west, every day on his way home. He begins his detour driving 2 miles straight south, then 1 mile straight east, then 4 miles straight south, then 6 miles straight west, then 3 miles straight north, then 1 mile straight west, and then 3 miles straight north. How many more miles did he drive by taking the detour than if he could have stayed on the highway?

- (F) 6
- (G) 12
- (H) 13
- (J) 14
- (K) 20

### Question 5

Dasha is calculating the weekly payroll for her small business. One employee earns \$7.50 per hour and has worked 4 days this week:  $7\frac{1}{4}$  hours on Monday,

$6\frac{3}{4}$  hours on Tuesday,  $9\frac{1}{4}$  hours on Thursday, and  $8\frac{1}{2}$

hours on Friday. Which of the following is the best estimate for the employee's pay for this week before any deductions are made?

- (A) \$39
- (B) \$231
- (C) \$234
- (D) \$236
- (E) \$238