

Expressions, Equations, and Inequalities

Unit Test: A

1. Which equation below matches the relationship shown in the table?

X	0	1	2
у	0.5	3.5	6.5

- A y = 2x + 0.5 C y = 3x
- B y = 2x + 2
- D y = 3x + 0.5
- 2. Which value of x satisfies the equation below?

$$4x - 7 = 25$$

- A x = -8
- C x = 8
- B x = 4.5
- D x = 32
- 3. The equation y = 15x + 500 represents the amount y that Lin earns by working for x hours, plus a performance bonus. What is Lin's hourly rate?
 - A \$10
- C \$50
- B \$15
- D \$500
- 4. What is the solution to the inequality below?

$$2x + 10 \le 40$$

- A $x \leq 10$
- C $x \ge 10$
- B $x \le 15$
- D $x \ge 15$
- 5. What is the solution to the equation below?

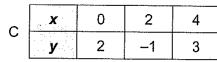
$$\frac{x}{-3}=4$$

- A x = -7
- C x = -1

6. Which table represents the same linear relationship as y = 2x - 5?

۸	X	0	2	4
A	у	– 5	-1	3

b	X	Ö	2	4
Đ	у	-5	1	3



D	X	0	2	4
	У	2	2	3

7. Which of the following inequalities has the graphed solution below?



- A $x+1\geq 0$
- C $x+1 \le 0$
- B $x 1 \ge 0$
- D $x 1 \le 0$
- 8. Which equation has x = -2 as the solution?
 - A 2x + 10 = 14
- C 3x + 10 = 1
- B 2x + 8 = 4
- D 3x 8 = 7
- 9. Boris currently has \$1,200 in his savings account. He saves \$25 per month. He saves the same amount each month and does not take any money out of the account. In how many months will Boris have \$1,450?
 - A 10
- C 15
- B 12
- D 25
- 10. Kayla tutors a student for \$18.50 per hour. She spends \$50 on transportation. How much does she earn if she tutors for x hours?
 - A 18.50x 50
- C 50x 18.50
- B 18.50x + 50
- D 50x + 18.50