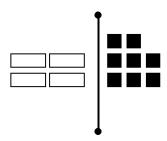
## **Final Exam Review - Unit 6**

## Multiple Choice

Identify the choice that best completes the statement or answers the question.

\_\_\_\_ 1. A black square represents -1 and a white rectangle represents the variable x. Find the value of x.



- a. -10
- b. 2
- c. -2
- d. -6

2. Two less than five times a number is 18. Let n represent the number. Solve for n.

- a. 6
- b. -4
- c. 4

d. -6

3. Solve this equation. 20 - 3x = 14

a. 2

- b. −2
- c. 3
- d. -3

\_\_ 4. Solve this equation. -5 + 5x = -10

- a -2
- b. -1
- c. -3
- d. -5

\_\_\_\_ 5. Solve this equation.  $\frac{x}{-5} = -9$ 

- a. -45
- b -4
- c. 45
- d. -14

6. Solve this equation.  $\frac{w}{8} - 4 = 0$ 

- a. -32
- b. 32
- c. -12
- d. 12

7. Expand. -6(5-x)

- a. -30 + 6x
- b. -30-6x
- c. -11-6x
- d. -30 x

8. Solve this equation: 40 = 10(-v+9)

- a. 5
- b. −5
- c.  $-\frac{31}{10}$
- d. 41

9. Make a table of values for the relation y = 1 - 4x for x = 1, 2, 3, and 4.

a.

x	1	2	3	4
У	-4	<b>–</b> 5	<del>-</del> 6	<b>-</b> 7

c.

x	1	2	3	4
У	-3	<del>-</del> 6	9	-12

b.

X	1	2	3	4
y	-3	-7	-11	-15

d.

x	1	2	3	4
y	3	7	11	15

\_\_\_\_ 10. The ordered pair ( , 5) is in the linear relation with equation y = 3x - 4. Find the missing number in the ordered pair.

a. 3

b.  $\frac{1}{3}$ 

c. 6

d. -6

11. Which relations have graphs that are lines going up to the right?

i) 
$$y = -5x + 3$$

ii) 
$$y = 5x + 3$$

iii) 
$$y = -5x - 3$$

iv) 
$$y = 5x - 3$$

a. ii and iv

b. i and iii

c. ii

d. i, ii, and iv

## Final Exam Review - Unit 6 Answer Section

## MULTIPLE CHOICE

1.	ANS:	C PTS: 1 DIF: Moderate			
	REF:	6.1 Solving Equations Using Models	LOC: 8.PR2		
	TOP:	Patterns and Relations (Variables and Equations)	KEY: Conceptual Understanding		
2.	ANS:	C PTS: 1 DIF: Moderate			
		6.1 Solving Equations Using Models	LOC: 8.PR2		
		Patterns and Relations (Variables and Equations)	KEY: Conceptual Understanding		
3.	ANS:				
		6.2 Solving Equations Using Algebra	LOC: 8.PR2		
		Patterns and Relations (Variables and Equations)	KEY: Conceptual Understanding		
4.	ANS:				
		6.2 Solving Equations Using Algebra	LOC: 8.PR2		
_		Patterns and Relations (Variables and Equations)	KEY: Conceptual Understanding		
5.	ANS:		LOC. 0 DD2		
		6.3 Solving Equations Involving Fractions  Patterns and Polations (Variables and Equations)	LOC: 8.PR2		
6	ANS:	Patterns and Relations (Variables and Equations)  B PTS: 1 DIF: Moderate	KEY: Conceptual Understanding		
0.		6.3 Solving Equations Involving Fractions	LOC: 8.PR2		
		Patterns and Relations (Variables and Equations)			
7	ANS:	· · · · · · · · · · · · · · · · · · ·	REF: 6.4 The Distributive Property		
7.		8.PR2 TOP: Patterns and Relations (Variables a			
		Conceptual Understanding			
8.	ANS:				
	REF:	6.5 Solving Equations Involving the Distributive Proper	rty		
	LOC:	8.PR2 TOP: Patterns and Relations (Variables a	and Equations)		
	KEY:	Conceptual Understanding			
9.	ANS:		REF: 6.6 Creating a Table of Values		
	LOC:	8.PR1 TOP: Patterns and Relations (Patterns)	KEY: Conceptual Understanding		
10.	ANS:		REF: 6.6 Creating a Table of Values		
		8.PR1 TOP: Patterns and Relations (Patterns)	KEY: Conceptual Understanding		
11.	ANS:		REF: 6.7 Graphing Linear Relations		
		8.PR1 TOP: Patterns and Relations (Patterns)			
	KEY:	Conceptual Understanding   Problem-solving Skills			