Algebra 2

Topic 3 // Test Review A

N:

D:

P: 1 2 3 4 5 6

Standards: 2.0

Holt: Ch. 3 Systems

1. How many solutions does the system have?

$4y = 12x - 20$

$2y = 6x + 4$

2. How many solutions does the system have?

$y = 3x - 2$

$y = -2x + 8$

3. How many solutions does the system have?

$6x + 3y = 12$

$y = -2x + 4$

4. Solve the system

$4x - y = 6$

$-2x + 3y = 12$

5. Solve the system

$3x + 2y = -6$

$-x - y = -2$

6. Solve the system

$y = 2x + 1$

$y = -2x + 5$

7. Tony has a total of 28 nickels and quarters. If the total value of the coins is $6.10, how many dimes and quarters does he have? [Just set up the system]

8. Guy has a total of 43 nickels and dimes. If the total value of the coins is $9.45, how many dimes and quarters does he have? [Just set up the system]

9. Solve the system for x

$8x + y = 17$

$x + 4y = 37$

10. Solve the system for y

$4x + 3y = 12$

$x = 5y - 20$

11. Solve the system

$x + y + z = 10$

$2x - y + z = 2$

$-x + 2y - z = 5$

12. Solve the system

$x - y + z = 0$

$3x - 2y + 6z = 9$

$-x + y - 2z = -2$

13. Solve the system

$2x + y + z = 8$

$x + 2y - z = -5$

$2x - y - z = 0$

14. Tickets for a basketball game cost $10 each for adult seats and $5 for students seats. Mike buys a total of 6 tickets and spends $45. How many tickets for adult seating did Mike buy?

15. Tickets for a XC meet game cost $5 each for adult admittance and $2 for students admittance. Benny buys a total of 24 tickets and spends $87. How many tickets for students did Benny buy?

16. Solve the system

$4x - 2y + 5z = 6$

$3x + 3y + 8z = 4$

$x - 5y - 3z = 5$

17. Solve the system

$x + 2y + z = 14$

$y - z = 1$

$x + 3z = 6$

18. Solve the system for either x or y [not both]

$3x - y = 1$

$2x + y = 14$

Algebra 2 sms 0809

Unit 3 Test Review A Solutions

Name:
Date: Period: 1 2 3 4 5 6

Standards: 2.0 Holt: Ch. 3 Systems

1. How many solutions does the system have?

$4y = 12x - 20$

$2y = 6x + 4$

No solution

2. How many solutions does the system have?

$y = 3x - 2$

$y = -2x + 8$

1 sol. (2, 4)

3. How many solutions does the system have?

$6x + 3y = 12$

$y = -2x + 4$

∞ many sol.

4. Solve the system

$4x - y = 6$

$-2x + 3y = 12$

(3, 6)

5. Solve the system

$3x + 2y = -6$

$-x - y = -2$

(-10,12)

6. Solve the system

$y = 2x + 1$

$y = -2x + 5$

(-2, -3)

7. Tony has a total of 28 nickels and quarters. If the total value of the coins is $6.10, how many dimes and quarters does he have?
[Just set up the system]

n + q = 28
.05n + .25q = 6.10

8. Guy has a total of 43 nickels and dimes. If the total value of the coins is $9.45, how many dimes and quarters does he have?
[Just set up the system]

n + d = 43
.05n + .10d = 9.45

9. Solve the system for x

$8y + y = 17$

$x + 4y = 37$

x = 1

10. Solve the system for y

$4x + 3y = 12$

$x = 5y - 20$

y = 4

11. Solve the system

$x + y + z = 10$

$2x - y + z = 2$

$-x + 2y - z = 5$

(2, 5, 3)

12. Solve the system

$x - y + z = 0$

$3x - 2y + 6z = 9$

$-x + y - 2z = -2$

(1, 3, 2)

13. Solve the system

$2x + y + z = 8$

$x + 2y - z = -5$

$2x - y - z = 0$

(2, -1, 5)

14. Tickets for a basketball game cost $10 each for adult seats and $5 for students seats. Mike buys a total of 6 tickets and spends $45. How many tickets for adult seating did Mike buy?

3 adult tickets

15. Tickets for a XC meet game cost $5 each for adult admittance and $2 for students admittance. Benny buys a total of 24 tickets and spends $87. How many tickets for students did Benny buy?

11 student tickets

16. Solve the system

$4x - 2y + 5z = 6$

$3x + 3y + 8z = 4$

$x - 5y - 3z = 5$

No solution

17. Solve the system

$x + 2y + z = 14$

$y - z = 1$

$x + 3z = 6$

No solution

18. Solve the system for either x or y [not both]

$3x - y = 1$

$2x + y = 14$

x = 3 or y = 8