STAPLE

Name _____

Gillespie

Course 3: Ch6 Test Review Key

Equations and Inequalities

Directions: When working each of the following questions, be sure to show all work. Be sure to round any decimals to the nearest hundredth.

1) Represent the statment as an equation. The sum of six times a number and 7 is -8.

a) $6n + 7 = -8$

b) $6(n + 7) = -8$

c) $6 * 7 + 6 * n = -8$

d) $6 * -8 + 7$

2) 9 less than the quotient of a number and 4 is 6

a) $\frac{n}{4} - 9 = 6$

b) $\frac{n-4}{x} - 9 = 6$

c) $\frac{4n}{x} - 9 = 6$

d) $\frac{n}{4x} - 9 = 6$

3) Solve $6 - \frac{2}{5}n = -44$

125

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4) Solve $8t + 6.95 = 24.95$

2.25

5) Solve $-0.6s + 8 = -4.3$

20.5

6) Solve $10 = \frac{b}{-2} + 7$

-6

7) $-4x + 12 = -8$

5

8) $-16 = -\frac{2}{3}y - 12$

6

9) $-4 = \frac{16+z}{14}$

-72

10) $7b - 4(b - 3) = 6(3b - 3)$

2

11) $15 - 5(7c - 2) = 5(1 + c)$

0.5

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12) North Shore Bikes rents bikes for $10 plus $4 per hour. Vinnie paid $30 to rent a bike. Define a variable. Then write and solve an equation to determine the number of hours he rented the bike

a) $t = 4h + 10; Vinnie\ rented\ the\ bike\ for\ 4\ hours$

b) $t = 4h + 10; Vinnie\ rented\ the\ bike\ for\ 5\ hours$

c) $t = 4(30) + 10; Vinnie\ rented\ the\ bike\ for\ 120\ hours$

d) $30 = 4h + 10; Vinnie\ rented\ the\ bike\ for\ 6\ hours$

13) Solve $6x + 3 = 8x - 21$

12

14) Solve $-3m + 12 - 4m = -7m + 14$

a) $m = 26$

b) $m = -2$

c) $infinite\ solutions$

d) $no\ solution$

15) Solve $4(x - 3) + 10 = 2(2x - 1)$

a) $1 = x$

b) $x = 1$

c) $infinite\ solutions$

d) $no\ solution$

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16) Solve the inequality $40x < 15x + 50$

a) $x > -2$

b) $x < -2$

c) $x > 2$

d) $x < 2$

17) Solve the inequality $25 + 17x \leq 10 + 14x$

a) $x \geq 5$

b) $x \geq -5$

c) $x \leq 5$

d) $x \leq -5$

18) Solve the inequality $5x - 7 > 4x - 3$

a) $x > 4$

b) $x < -4$

c) $x > -4$

d) $x < 4$

19) Identify y

$y = 4x + 9$

$y = -5x$

x = -1

y = 5

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20) Identify y

$y = -x + 7$

$y = x - 11$

x = 9

y = -2

21) Identify x *and* y

$y = -x + 15$

$y = 4x$

a) $y = 3, x = 12$

b) $x = -12, y = -3$

c) $y = -12, x = -3$

d) $x = 3, y = 12$