For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

1. Find the additive inverse (opposite) of $\frac{2}{9}$.

[A]
$$-\frac{2}{9}$$

[A]
$$-\frac{2}{9}$$
 [B] $\left|\frac{2}{9}\right|$ [C] $-\frac{9}{2}$ [D] $\frac{9}{2}$

[C]
$$-\frac{9}{2}$$

[D]
$$\frac{9}{2}$$

Simplify:

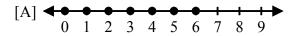
2.
$$36 \div 6 \cdot 6 + 5 - 4$$

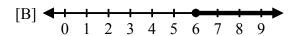
$$3. -(-8) - 2(8 - 3)$$

For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

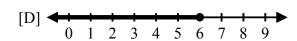
Dressler Renton Tech College Su2005

4. Which number line represents the graph of 6?









5. Find the additive inverse of 6.5.

6. Write 900 as a product of primes.

[A]
$$4 \times 3^2 \times 5^2$$

[B]
$$2 \times 3^2 \times 5^2$$

[A]
$$4 \times 3^2 \times 5^2$$
 [B] $2 \times 3^2 \times 5^2$ [C] $2^2 \times 3^2 \times 5^2$ [D] $2 \times 3 \times 5$

[D]
$$2 \times 3 \times 5$$

For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

7. Subtract: (-8) - (-9)

8. Insert =, <, or > to make a true statement: $-\frac{12}{13}$ ____ $-\frac{1}{3}$.

$$[B] = [C] <$$

[D] none of these

9. Find: $\frac{2}{7} - 3\left(\frac{1}{2} + 4\right)$ [A] $-5\frac{3}{14}$ [B] $-13\frac{3}{14}$ [C] $13\frac{3}{14}$ [D] $5\frac{3}{14}$

[A]
$$-5\frac{3}{14}$$

[B]
$$-13\frac{3}{14}$$

[C]
$$13\frac{3}{14}$$

[D]
$$5\frac{3}{14}$$

10. Multiply: -7(x+2)

[A]
$$-7x - 14$$
 [B] $-7x + 2$ [C] $-7x + 14$ [D] $-7x - 2$

[B]
$$-7x + 2$$

$$[C] -7x + 14$$

$$[D] -7x - 2$$

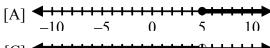
For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

11. Write an expression to represent "the product of a number and 24."

- 12. Solve: 7 = 4(x + 9) 3x [A] -29 [B] -2 [C] 29 [D] 2

13. Graph: $x \ge 5$



- 10
- 10 0
- [D] **◆**+++++++ -10 0 10

- 14. Solve: 9x 6 = 75 [A] 8
- [B] 9
- [C] 69
- [D] 18

For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

15. Write an expression to represent the following:

"q subtracted from the product of 2 and r"

[A]
$$2r - q$$

[B]
$$q - 2r$$

[A]
$$2r - q$$
 [B] $q - 2r$ [C] $(q - 2)r$ [D] $2(r - q)$

[D]
$$2(r - q)$$

16. Is $-\frac{10}{3}$ a solution of the equation 3x-7=3?

Simplify:

17.
$$5x + 4y - 7x - 7y$$

$$[A] -2x-3y$$

[B]
$$12x - 3y$$

[A]
$$-2x-3y$$
 [B] $12x-3y$ [C] $-2x+11y$ [D] $12x+11y$

[D]
$$12x + 11y$$

For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

Simplify:

18.
$$x + 3(x - 4) + (x - 2)$$

Solve:

19.
$$\frac{1}{14} + s = \frac{3}{14}$$

20.
$$3x - 5 = x - 4$$
 [A] $\frac{1}{2}$ [B] $-\frac{1}{2}$ [C] -2 [D] 2

[A]
$$\frac{1}{2}$$

[B]
$$-\frac{1}{2}$$

For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

Solve:

$$21. -3(x-4) > -4-3x$$

[A] x < 0 [B] x > 0 [C] all real numbers [D] no solution

22. Evaluate
$$\frac{y}{2x} - z$$
 for $x = 3$, $y = 24$, and $z = 2$.

[A] 6

[B] 2 [C] -4

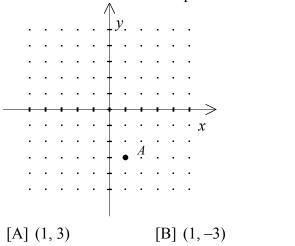
[D] -10

23. Name the quadrant or axis containing the point (2, 4).

For each problem, show your work in the space provided. Write your Final Answer (and the letter answer) on the Answer Sheet provided.

Dressler Renton Tech College Su2005

24. What are the coordinates of point A?



$$[B] (1, -3)$$

$$[C] (-3, 1)$$

$$[C] (-3, 1)$$
 $[D] (-1, -3)$

25. A ski-lift that runs to the top of a hill has a rise to run ratio of $\frac{1}{3}$. The horizontal distance from the bottom of the lift to the center of the mountain is 4000 ft. How high is the hill?

Dressler Renton Tech College Su2005	
[1]	
[2]	-
[3]	-
[4]	
[5]	-
[6]	
[7]	_
[8]	
[9]	
[10]	
[11]	-
[12]	
[13]	
[14]	
[15]	

Dressler Renton Tech College Su2005	
[16]	
[17]	
[18]	_
[19]	_
[20]	
[21]	
[22]	
[23]	
[24]	
[25]	

Dressler Renton Tech College Su2005		
[1]] [A]	
[2]] 37	
[3]] _2	
[4]] <u>[C]</u>	
[5]] _6.5	
[6]] <u>[C]</u>	
[7]] 1	
[8]] <u>[C]</u>	
[9]] [B]	
[10]	0] [A]	

Dressler Renton Tech College Su2005	
[11] $\underline{x \cdot 24}$	
[12] [A]	
[13] [A]	
[14] [B]	
[15] [A]	
[16] No	
[17] [A]	
[18] $5x - 14$	
[19] 2/14	
[20] [A]	

Dressler Renton Tech College Su2005
[21] [C]
[22] [B]
[23] quadrant I
[24] [B]
[25] 1333.3 ft.