**QUIZ 3 MATH 65 SU 14; *THE FIRST 10 PROBLEMS* *ONLY* ARE IN-CLASS. *PROBLEMS 11 to 14 are TAKE HOME.***

**1. Sec. 2.4**
**(a) 15 is what percent of 60? Translate this AND SOLVE. (b) What number is 30 % of 240? Translate this AND SOLVE**

**2. Sec. 2.4. *Translate and Solve* for x in percent form: 6 is what percent of 24 ?**

**3. Sec. 2.4. *Translate and Solve.* What number is 20 % of 80 ?**

**SECTION 2.5 BELOW**

**4. Translate. Three less than twice a number is 19.**

**5. What is the solution to the CORRECT answer to previous problem ?**

**6. Sec. 2.5. The perimeter of a rectangle is P = 56 m. The length L is 4 m more than the width W. What is the width W? What is the length L?**

**7. Sec. 2.5. A car race extends for a total distance of 300 miles, *starting* at Station A and *ending* at Station B. If a "muscle" car is twice as far from Station A as from Station B, then what is the car's distance from Station B? What must be the distance of the car from station A?**

**SECTION 2.6 BELOW. Solve and graph on a *horizontal number line.***

**8. Sec. 2.6. Solve and graph. $9 + 4y < 33$**

**9. Sec. 2.6 Solve and graph. $30 < -10x$**

**10. SEC. 2.6 FOR EACH PART BELOW, DETERMINE WHETHER EACH NUMBER IS A SOLUTION TO THE INEQUALITY: SUBSTITUTE THE NUMBER INTO THE INEQUALITY. IF THE NUMBER IS A SOLUTION, WRITE "YES"; IF NOT, WRITE "NO".**
**$x < 18$**
**(a) 17.99 (b) 18.01 (c) 18**

**TAKE H0ME BELOW**

**11. SEC. 2.6. SOLVE AND GRAPH: $(x + 3) + 9 > 3(x - 2) - 10$**

**12. SEC. 2.7. RJ'S PLUMBING AND HEATING CHARGES $55 PLUS $40 PER HOUR FOR EMERGENCY SERVICE. CHARLOTTE REMEMBERS BEING BILLED *AT LEAST* $215 FOR AN EMERGENCY CALL . HOW LONG ( IN HOURS) WAS RJ'S SERVICE AT HER HOME?**

| |
|---|
| **13. SEC. 2.7. LESLIE'S FIRST FOUR QUIZ GRADES ARE 73, 75, 89 AND 91. SHE WANT TO EARN AN AVERAGE OF AT LEAST 85 % . WHAT SCORE ON THE $5^{TH}$ QUIZ WILL HER AVERAGE QUIZ GRADE BE AT LEAST 82?** |
| **SEC. 3.1.** |
| **14. PLOT EACH POINT: ( 1, 1), ( 2, -2), (-1, 4), (-2, -5), (0, 4), (-3, 0) ; USE ATTACHED GRAPH PAPER.** |

# QUIZ 3 PT 1 solutions

1. a. $15 = n \cdot 60$

$\frac{15}{60} = n$

$0.25 = n$

$n = 25\%$

2. $6 = n \cdot 24$

$\frac{1}{4} = n$

$n = 25\%$

3. $n = (0.20)(80)$

$= 16$

4. $2x - 3 = 19$

$2x = 22$

$x = 11$

5.

6. $x = (0.30)(240)$

$x = 72$

6.

$56 = 2L + 2W$

$56 = 2 \cdot (4+W) + 2W$

$56 = 8 + 2W + 2W$

$56 = 8 + 4W$

$56 - 8 = 4W$

$48 = 4W$

$12 = W$

$L = 16$

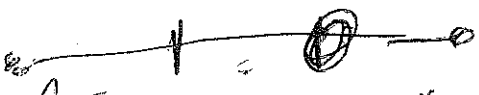
QUIZ 3 PART 1

CRN 10113

MATH65-083

2- 6/25/2014

(7.)




$3d = 300$ miles

$d = 100$ miles.

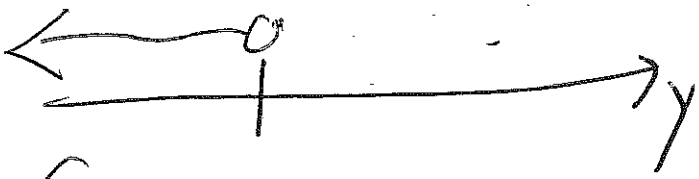
FROM B: $d = 100$ miles.

$2d = 200$ miles from A.

(8) $9 + 4y \leq 33$

$4y \leq 24$

$y \leq 6$




(9.) $30 < -10x$

$\frac{30}{-10} > \frac{-10x}{-10}$

$-3 > x$


(10.) $x < 18$ ; T. = TRUE, F. = FALSE

(a) $17.99 < 18$ (T.)

(b) $18.01 < 18$ (F.)

(c) $18 < 18$ (F.)