QUIZ 3 6-26-14 and 6-30-14 CRN 10113 MATH65-083

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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. $15 = n \cdot 60$

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

$0.25 = n$

$n = 25\%$

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

$x = 72$

2. $6 = n \cdot 24$

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

$n = 25\%$

3. $n = (0.20)(89)$

$= 16$

4. $2x - 3 = 19$

$2x = 22$

$x = 11$

5.

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

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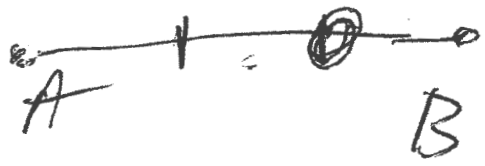
(9.)



$3d = 300$ miles

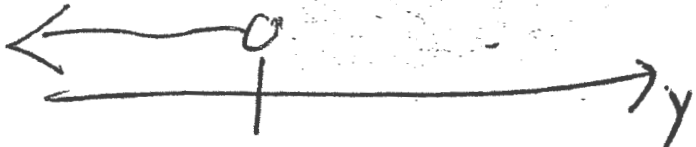
$d = 100$ miles.

200 miles

(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.)

(11.) $(x+3) + 9 > 3(x-2) - 10$

$x + 3 + 9 > 3x - 6 - 10$

$x + 12 > 3x - 16$

$12 > 2x - 16$

$28 > 2x$

$14 > x$

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(12)

$215 \geq 55 + 40t$

$160 \leq 40t$

$4 \leq t$

(13)

146 180

$\frac{53 + 75 + 89 + 91 + x}{5}$

$= \text{score}$

$\text{score} \geq 82$

$\frac{328 + x}{5} \geq 82$

$328 + x \geq 410$

$x \geq 82$

(14.)