Algebra 1 ECA Remediation Name_____

Review Worksheet - Day 6

Simplify each expression.

1) $4(3x + 5)$

2) $8n + 5(1 + 9n)$

3) $-(5k - 8) + 5(k - 8)$

Solve each equation.

4) $8(5 + p) - 2p = 38 + 8p$

5) $-4.5(m - 2.75) - 6.2 = -10.355 - 7.4m$

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

Find the mistake that was made when solving each equation. Explain why the work shown is incorrect. Solve each equation correctly.

7) $2(p + 5) = 34 - p$
$2p + 10 = 34 - p$
$p + 10 = 34$
$p = 24$

Solve each proportion.

8) $\frac{x+4}{8} = \frac{7}{9}$

9) $\frac{6}{4} = \frac{n}{n-3}$

Solve each equation for the indicated variable.

10) $V = \pi r^2 \cdot h$, solve for h

Solve each inequality.

11) $4(6v + 3) \geq -18 - 6v$

12) $-6x + 8(x + 1) \geq 3(x + 4)$

Solve each compound inequality.

13) $33 \leq -10v + 3 \leq 73$

Write an inequality that can be used to solve each problem, and solve the inequality.

14) Morgan spent \$13 on 5 pairs of socks

A. Write an inequality that can be used to determine the maximum number of pairs of socks that Morgan can purchase with \$10.

B. What is the maximum number of pairs of socks that Morgan can buy with \$10?

15) Oscar can rent a bike from Zach's Bike shop with a \$15 deposit plus an hourly fee. Oscar pays \$32.85 to rent a bike for 7 hours.

A. Write an inequality that can be used to determine how long you can rent a bike with \$40.

B. What is the maximum number of hours that a bike can be rented with \$40?

Answers to Review Worksheet - Day 6

1) $12x + 20$
2) $53n + 5$
3) -32
4) $\{1\}$
5) $\{-5.7\}$
6) $\{-\frac{1}{5}\}$
7) {should have added p to both sides, 8}
8) $\{2.22\}$
9) $\{9\}$
10) $\{\frac{V}{\pi r^2} = h\}$
11) $v \geq -1$
12) $x \leq -4$
13) $-7 \leq v \leq -3$
14) $10 > 2.6x$, 3 pairs of socks
15) $40 > 2.55x + 15$, 9 hours