

ALGEBRA 2

Name _____
QUIZ 1004

You may use your textbook to assist you in taking this quiz.

1. Find the product of a binomial. ***It's OK to show work!!!***

$$(3x + 7)(4x - 5)$$

2. Factor the trinomial. ***It's OK to show work!!!***

$$15x^2 - 19x - 10$$

3. Factor each polynomial by grouping. PLACE A CHECK MARK \checkmark IN FRONT OF THE ONE PROBLEM YOU WISH TO COUNT FOR CREDIT.

It's OK to show work!!!

___ a. $8x^3 - 64x^2 + x - 8$

___ b. $48x^3 - 42x^2 + 56x - 49$

___ c. $12x^3 + 2x^2 - 30x - 5$

5. Solve each linear equation. *It's OK to show work!!!*

a. $4(x + 2) + 3 = 2x + 5$

b. $-18x - 6x = 6(1 + 3x)$

c. $2(4x - 3) - 8 = 2x + 4$

6. Solve each inequality. Remember situations with division with a (-).

It's OK to show work!!!

a. $5(x + 8) \geq 2x + 1$

b. $2x + 15 \leq 3$

c. $-42 \leq -6(x + 12)$

7. Solve each absolute value equation. *It's OK to show work!!!*

a. $|5x| + 3 = 53$

b. $|2x - 1| = 5$

c. $|3x + 8| = 7$

BONUS

Write an absolute value equation that has the given solutions
-10 and 2

Plot the solutions on the number line

