Name:

QUIZ – MATH GRADE 10

1. (7%) Expand and simplify: $(3x-9)(4x+12)$

2. (8%) Expand and simplify: $(1+\sqrt{x}-\frac{1}{\sqrt{x}})(\sqrt{x}-1)$

3. (10%) Expand and use exponents to simplify: $(3^{2x}+3)(3+3^{2x})$

4. (7%) Take the biggest possible common factor $-4x^2ab^2-8xa^2b=$

5. (8%) Take the biggest possible common factor so that x has a positive exponent

   $ax^{n+1}+bx^{n+3}=$

6. (10%) Complete the square: $x^2+2x+6=$

7. (10%) Complete the square: $2x^2-6x+8=$

8. (10%) Complete the square: $3x^2 - 2x + 2 =$

9. (10%) Factor if possible:

   $x^2 + 8 =$

   $ax^2 - b =$

10. (10%) Factor and simplify as much as possible

$$\frac{x^2 - 64}{x^2 + 9x + 8} =$$

11. (10%) Factor and simplify as much as possible

$$\frac{2x^2 + 3x - 14}{6x^2 + 23x + 7} =$$