WAYGROUND formerly Quizizz **Worksheets**

Name

Class

Date

Factoring Quadratic Equations

Total questions: 25

Worksheet time: 3hrs 2mins

Instructor name: Mr. Terrance McClendon

1. Factor

   r^2 -16r + 60

   a) (r - 6)(r + 10)

   b) (r - 6)(r - 10)

   c) (r +30)(r - 2)

   d) (r - 15)(r + 4)

2. Factor

   x^2 -16x + 48

   a) (x - 12)(x - 4)

   b) (x + 6)(x - 8)

   c) (x + 12)(x - 4)

   d) (x -16)(x - 3)

3. Factor

   x^2+12x+35

   a) Prime

   b) (x+4)(x+3)

   c) (x+7)(x-5)

   d) (x+5)(x+7)

4. Factor

   d^2 - 10d + 25

   a) (d - 5) (d - 5)

   b) (d + 5) (d - 20)

   c) (d + 5) (d - 5)

   d) (d - 15) (d + 10)

5. Factor

   x^2 + 11x + 24

   a) (x + 10)(x + 2)

   b) (x + 2)(x + 12)

   c) (x + 6)(x + 4)

   d) (x + 8)(x + 3)

6. Factor

$x^2 - 9x + 20$

a) (x - 20)(x - 1)

b) (x - 10)(x + 2)

c) (x - 10)(x - 2)

d) (x - 5)(x - 4)

7. Factor

$x^2 - x - 6$

a) (x + 1)(x - 2)

b) (x + 3)(x - 2)

c) Not Factorable

d) (x - 3)(x + 2)

8. Take out the Greatest Common Factor

$18a^2-15a$

a) 3(6a-5)

b) 15a(3a-1)

c) 3a(6a-5)

d) 3a(6a-1)

9. What is the GCF of the trinomial?

$3x^2 - 9x -120$

a) 6

b) 3

c) 2

d) 9

10. Factor

12x + 9

a) not factorable

b) 3(4x - 3)

c) 3(4x + 3)

d) x(12+9)

11. Factor Completely:

$c^2 + c - 42$

a) (c - 2)(c + 21)

b) (c + 14)(c - 3)

c) (c - 6)(c + 7)

d) (c + 7)(x + 6)

12. Factor by GCF:
$56a^3 - 8a$

a) $8a^2(35a^2-a)$
b) $8a^2(56a^3-8a)$
c) $8a(7a^3-a)$
d) $8a(7a^2-1)$

13. Factor
$x^2 + 0x - 25$

a) $(x + 5) (x - 5)$
b) $(x - 5) (x - 5)$
c) $(x + 5) (x + 5)$
d) Prime

14. Factor the Trinomial:
$x^2 - 8x + 15$

a) $(x + 15) (x - 1)$
b) $(x - 5) (x - 3)$
c) $(x + 5) (x + 3)$
d) $(x - 7) (x - 8)$

15. How do you factor a trinomial when the coefficient of x^2 is 1? (ex: $x^2 - 2x + 10$)

a) Slip & Slide
b) Find what multiplies to the last number and adds to the middle
c) Difference of two squares
d) Take out the GCf then you're done

16. What do you call a polynomial that cannot be factored?

a) Proper
b) FOIL
c) Simplified
d) Prime

17. Factor: $x^2 – 5x – 24$

a) $(x - 8)(x + 3)$
b) $(x - 19)(x + 5)$
c) $(x - 5)(x + 19)$
d) $(x - 3)(x + 8)$

18. Factor: $x^2 + 2x – 3$

a) $(x + 2)(x - 1)$
b) $(x + 1)(x - 3)$
c) $(x - 2)(x + 1)$
d) $(x - 1)(x + 3)$

19. Factor Completely: $5n^2 - 6n - 27$

a) (5n - 3)(n + 9)

b) (5n - 9)(n + 3)

c) (5n + 3)(n-9)

d) (5n + 9)(n - 3)

20. Factor

$2c^2 + 4c - 84$

a) (c-6)(2c+14)

b) (c+7)(2x-12)

c) 2(c+7)(c-6)

d) (c-4)(2c+21)

21. Factor Completely: $3x^2 + 5x - 12$

a) (3x - 4)(x + 3)

b) (3x - 3)(x + 4)

c) (3x + 3)(x -4)

d) (3x + 4)(x-3)

22. Factor

$r^2 - 12r + 27$

a) (r - 3) (r - 9)

b) (r + 3) (r + 9)

c) (r - 3)(r + 9)

d) (r + 3) (r - 9)

23. Factor

$3a^2 + 4a + 1$

a) (3a-1)(a-1)

b) (3a+1)(a+1)

c) Not factorable

d) (7a-10)(a-8)

24. What is the factored form of

$16x^2 - 16x - 12$?

a) 4(2x - 2) (2x + 2)

b) 4(2x - 6) (x + 2)

c) 4(2x - 3) (2x + 1)

d) 4(2x - 2) (2x + 3)

25. Factor Completely: $9x^2 - 49$

a) $(3x + 7)(3x + 7)$

b) $(3x - 7)(3x - 7)$

c) Not factorable

d) $(3x + 7)(3x - 7)$