

Practice final for MTH O3

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Print Name: _____

1. Evaluate each expression:

A. $(-27) + 20$

B. $(-5) - (-9)$

C. $(-5)(6)$

D. $(-42) \div (-6)$

E. -4^2

2. Evaluate each expression:

A. $(2 + 3)^2$

B. $\frac{-8 - 10}{-2 - (-8)}$

3. Evaluate: $2x^2 + 4x + 3$ when $x = -3$.

4. Given $C = \frac{9}{5}(F - 32)$, find C when $F = 86$

5. Simplify: A. $\frac{14x^6y^4}{7x^5y^3}$.

B. $(2^2)^4$

6. Simplify: $7x^5 + (4x)^2(5x^3)$

7. Add $(7x^2 - 6x - 4)$ and $(4x^3 - 8x^2 + 5)$

8. Subtract $(3x^2 - 4x + 8)$ from $(x - 7)$

9. Multiply and simplify: $(4x - 5)(3x + 4)$

10. Divide and simplify: $\frac{12x^5 - 6x^4 + 3x^2}{3x^2}$

11. Solve $3x - 7 - 6x = 5$ for x .

12. Solve $x - 1 = 2(x - 2)$ for x

13. Factor completely: $x^2 + 2x - 15$

14. Factor completely: $9x^2 - 25$

15. Factor completely: $4x^2 - 20x$

16. Find the slope of the line containing the points $(-1, -2)$ and $(-2, 4)$.

17. Solve: $\frac{x}{4} = \frac{x}{3} - \frac{7}{12}$.

18. Solve the system:
$$\begin{cases} 2x + y = -3 \\ 3x - 5y = -50 \end{cases}$$

19. The perimeter of a rectangle is 34 inches. The width is 3 feet more than the length. Find the length and the width.

20. Graph the line with equation $y = 3x + 1$ in the grid below. Plot at least three points.

