

Pre AP. Algebra I Spring Final Review #1

1. Solve by elimination:
$$\begin{cases} 3x - 2y = 6 \\ -5x - 3y = 9 \end{cases}$$

2. Simplify:
$$\frac{-6x^{-3}y^{-8}}{4x^4y^{-2}}$$

3. Multiply: $(3-z)(5-4z-z^2)$

4. Simplify: $(5-2x^2) + (4x^2+3x) + (-9-7x)$

5. Solve by substitution:
$$\begin{cases} 3x + 2y = 7 \\ y = 3x + 8 \end{cases}$$

6. Solve by elimination: $\begin{cases} 3x+4y=5 \\ x+y=2 \end{cases}$

7. Solve by elimination: $\begin{cases} 2x-3y=17 \\ 5x-3y=29 \end{cases}$

8. Solve using any method: $\begin{cases} 2x+2y=2 \\ y=1-x \end{cases}$

9. Evaluate: $3a^0 + 8b^0$

10. Simplify: $\frac{a^{-5}c^3}{e}$

11. Simplify: $\frac{m^{-4}t}{n^{-3}}$

12. Write 40,700,000 in scientific notation

13. Write .00074 in scientific notation

14. Evaluate: $a = -2$ $b = 3$ $c = -4$

a.) cb^{-a}

b.) $\frac{8^{-1}}{ca}$

c.) $\frac{a^b}{c}$

15. Express in Scientific notation

a. $(3 \times 10^6)(1.2 \times 10^2)$

$$b. (8 \times 10^5)^2$$

$$c. \frac{8.6 \times 10^9}{2 \times 10^4}$$

$$16. (6x^3y)(7xy^5)$$

$$17. (x^3y^{-2})(4x^4y^7)$$

$$18. \frac{a^{-3}d^4h^2}{a^6dh^2}$$

$$19. \frac{(2xy^{-3})^{-2}}{3x^{-5}y}$$

~~20. $(2ab)^3 \cdot ab^{-4}$~~

20. $(2ab)^3 \cdot \frac{ab^{-4}}{12a^{-3}b}$

21. Multiply: $(n+3)(n-8)$

22. Multiply: $(2x+4)(x^2-2x+3)$

23. Find the degree of the polynomial:
 $4x^4y^5 + 3xy + x^3$

24. Tell whether $(2, 9)$ is a solution of
 $y > 2x + 3$

Write the linear inequality.

25.



