1. Add and Check $(3x+2)+(x^2+x-8)$

2. Subtract and Check $(4x^2+7x^3-7)-(5x^2-7x+2)$

3. Multiply $(-x^4)(-x^2)$

4. Multiply : $(0.2x^9)(0.5x^7)$

5. Multiply: $9x(-2x+3)$

6. Use the Table method to multiply the following: $(x^2-x+6)(x+6)$

7. Multiply the following $(3x + 1)(2x^2 + 3x + 1)$

8. Multiply the following $\left(p-\frac{1}{7}\right)\left(p+\frac{1}{7}\right)$

9. Multiply the following $(x+4)(x-4)$

10. Subtract these polynomials: $(a^3 - b^3) - (-5a^3 + 2a^2b - ab^2 + 3b^3)$

11. Multiply: $(5x-2y)(5x-3y)$

12. Divide : $(18t^3 - 24t^2 + 6t) \div (2t)$

13. Divide: $(8x^2 - 10x + 2) \div 2$

14. Divide: $\frac{50x^5 - 7x^4 + x^2}{x}$

15. Express using positive exponents $\left(\frac{a}{2}\right)^{-5}$

16. Simplify $5^{-8} \cdot 5^{10}$

17. Multiply (leave answer in scientific notation) $\left(1.9\times10^{8}\right)\left(3.4\times10^{-3}\right)$

18. Divide(leave answer in scientific notation)

$$\frac{5.6\times10^{-2}}{2.5\times10^{5}}$$

19. Factor completely: $-6x^2-9x$

20. Factor : $x\left(x-2\right)+7\left(x-2\right)$

21. Factor completely: $5x^5+10x^3$

22. Perform the indicated operation: $\frac{13}{18}-\frac{4}{9}$

23. Solve for x: $4x+5x=10$

24. Solve for x: $\frac{2}{3}+\frac{1}{4}x=6$

25. Solve for L: $P=3L+4W$

26: Subtract these fractions and simplify, if possible: $\frac{7}{2a}-\frac{3}{2a}$

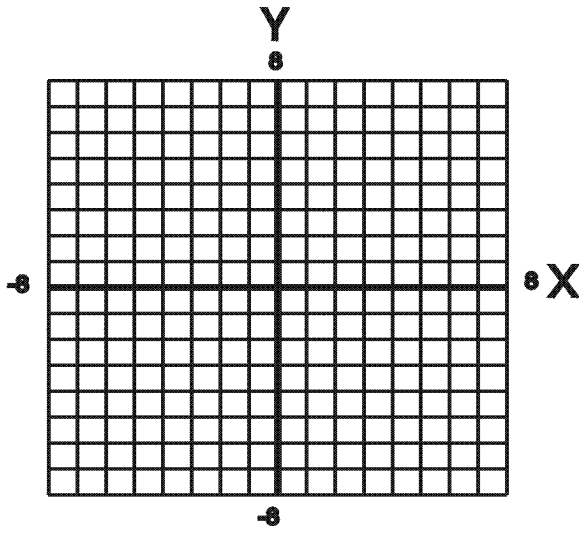
27: Divide and simplify, if possible: $\frac{10}{2a}\div\frac{5}{2a}$

28. Solve this equation for x: $\frac{2}{3}+4x=6x-\frac{2}{15}$

29. List these operations in the proper order: Exponent, Add, Multiply, Parenthesis

30. Draw a line that has the given slope and y-intercept:

Slope = m = $\frac{3}{4}$, and y-intercept (0 , –3)



31. Convert this equation to slope-intercept form

$$y-2=\frac{1}{3}(x+3)$$

(a) What is the slope?

(b) What is the y intercept?

32. Divide and simplify $\frac{5^8 m^8}{5^3 m^3}$