SM 3H

1.1 Adding, Subtracting & Multiplying Polynomials

2023-2024

SCORE: /

Name _____ Date _____ Period _____

Simplify each expression by adding or subtracting. Show work!!

1. $\left(-8x^2+2x+1\right)+\left(10x^2-x\right)$

2. $\left(6x^2+8x-2\right)+\left(3x^2-9x-4\right)$

3. $\left(5x^2+7x-8\right)-\left(7x^3+2x^2+3x\right)$

4. $\left(-x^2-10x+7\right)-\left(-2x^2+3x-1\right)$

5. $\left(-7x+3\right)+\left(-x^2+9x-1\right)-\left(-4x^2+12x-2\right)$

6. $\left(-x^2-12x-29\right)+\left(5x^3+4x-7x^2+6\right)$

Simplify each expression by multiplying. Show work!

7. $\left(x-6\right)\left(x+2\right)$

8. $\left(x+4\right)\left(2x^2-x+8\right)$

9. $\left(5y^2-2y-1\right)\left(y+4\right)$

10. $\left(x-1\right)\left(x+1\right)\left(5x-6\right)$

Simplify each expression. Show work!

11. $(x+3)(x-7)+(6x^2-7x-12)$

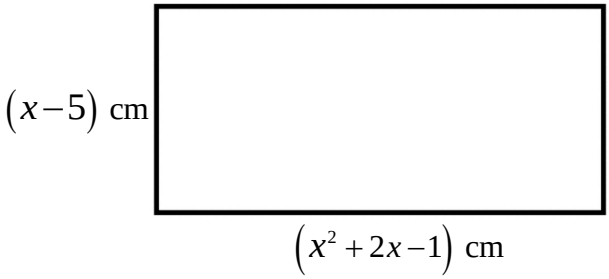
12. $(2x+4y)(x-2y)(3x+y)$

13. $(x-5)(3x^2+4x-1)-(-x^3+7x^2-6)$

14. Find the perimeter and area of the rectangle.

Perimeter:

Area:



Solve for the variable algebraically. Show work!

15. $8x-5=6x-45$

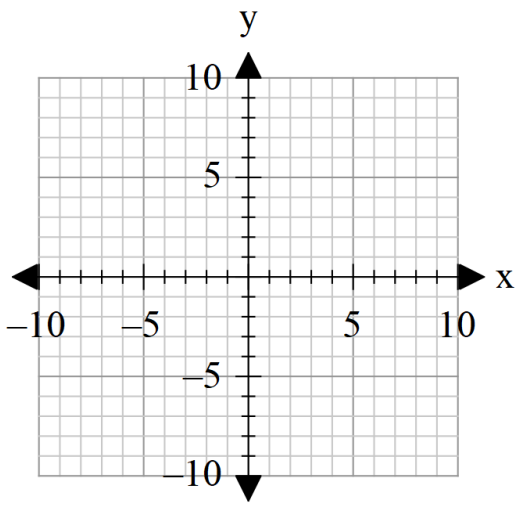
16. $2(5-2y)-3(1-y)=y+1$

17. $\frac{x-2}{3}+\frac{x+5}{2}=\frac{1}{3}$

18. $\frac{5x-2}{3}=\frac{2x+5}{6}$

Graph the following linear equations.

19. $y = \frac{2}{3}x - 4$



20. $4x + 3y = -12$