

1. $5x - 7x$
 $-2x$

2. $x^2 + 5x - 4x^2 + 7x$
 $5x^2 + 12x$

3. $3x(2 - 9x)$
 $-27x^2 + 6x$

4. $(2x + 7) - (2 - x)$
 $3x + 5$

5. $3x(2 - 3x + 4x^5)$
 $12x^6 - 9x^2 + 6x$

6. $(3x^2 - x - 7) - (5x^2 - 3x + 2)$
 $-2x^2 + 2x - 9$

7. $\frac{8x^5}{2x^3}$
 $4x^2$

8. $\frac{2}{3}x - \frac{x}{2}$
 $\frac{4x}{6} - \frac{3x}{6} = \frac{x}{6}$

9. $\frac{3x}{2} - \frac{x}{7}$
 $\frac{21x}{14} - \frac{2x}{14} = \frac{19x}{14}$

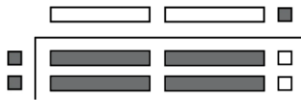
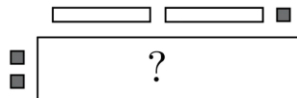
10. $\frac{2t}{5} - 3t$
 $\frac{2t}{5} - \frac{15t}{5} = -\frac{13t}{5}$

11. $(12t^2 - 8t^3) \div 4t^2$
 $3 - 2t$

12. $\frac{9ab^4 - 6a^3b^2}{3ab^2}$
 $3b^2 - 2a^2$

13. $-\frac{25p^2q - 15p^3q^3}{15pq}$
 $\frac{25p^2q - 15p^3q^3}{-15pq}$
 $-\frac{5p}{3} + p^2q^2$

14. Complete the following algebra tile diagram:



15. The polynomial $h(t) = 7t^4 + 4t^2 - t + 10$

a. How many terms are in this polynomial?

4

b. What is the coefficient of the t^2 term?

4

c. Find the degree of this polynomial

4

d. Find the constant term

10

16. Enrichment: Find the degree of the following polynomial:

$$P(x) = 2x^3y^2z + 8xy^2z$$

$$3 + 2 + 1 = 6$$