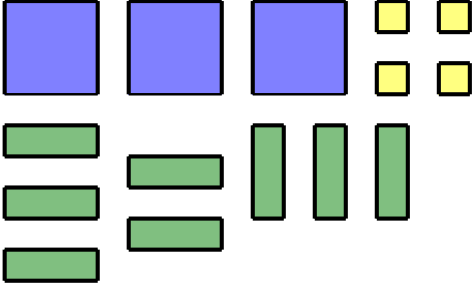
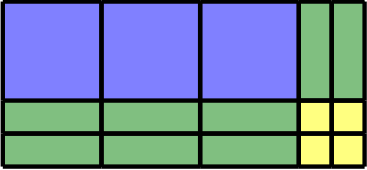


Please show all your work to ensure full credit.

- List two multiples of 20.
- Write 20 as product of prime factors.
- List two multiples of $2a^2b^5$.
- Of the two mathematical expressions listed below, which one is a multiple, and which one is a factor of $14(2x - 3)$
 - $28(x + 1)(2x - 3)$
 - $7(2x - 3)$
- Rewrite the polynomials below as a product by factoring out the greatest common factor.
 - $(x - 3)(2x - 1) + (x - 3)(x + 2)$
 - $(2x - 5)(3x + 1) - (3x + 1)(x - 1)$
 - $(a - b)(2a + b) - (b - a)(3a - 4b)$
 - $3x^4(x + 1)^4 - 15x^5(x + 1)^3$
- Add or subtract the following and simplify your results.
 - $$\frac{2x-5}{(x-3)(2x-1)+(x-3)(x+2)} + \frac{3+x}{(2x-5)(3x+1)-(3x+1)(x-1)}$$
 - $$\frac{2x-5}{(x-3)(2x-1)} - \frac{3+x}{(2x-1)(3x+1)}$$
- Factor by grouping each polynomial below.
 - $ab - ac - bc + b^2$
 - $-3t^2 + 5t - 6t + 10$

8. Use algebra tiles to factor the examples in the questions below. *Make sure you draw the rectangle representing your final answer.. Use the sample problem to guide your answer.*

Polynomial	Algebra Tiles	Rearranged tiles
a. $3x^2 + 8x + 4$		 <p data-bbox="987 478 1393 520">$3x^2 + 8x + 4 = (3x + 2)(x + 2)$</p>
b. $2x^2 + 7x + 3$		

9. Factor the following trinomials.

- a. $2x^2 - 7x + 5$
- b. $5x^2 - 4x - 1$
- c. $x^2 - 4y^2$
- d. $8x^3 + y^6$

10. Add or subtract the following and then simplify your answer so that the final answer is in the lowest terms.

- a. $\frac{2}{x-1} - \frac{3}{2x-1}$
- b. $\frac{x+3}{2x^2-7x+5} - \frac{x}{5x^2-4x-1}$