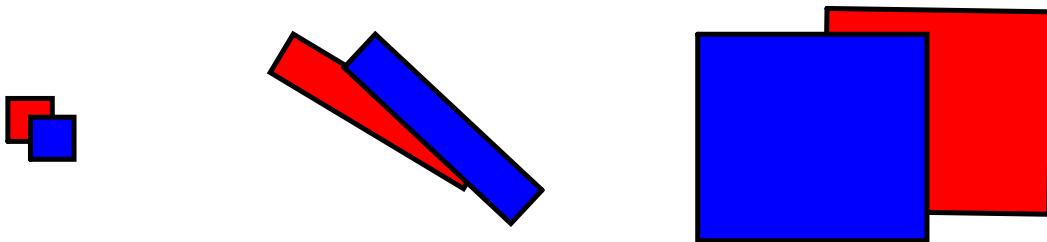
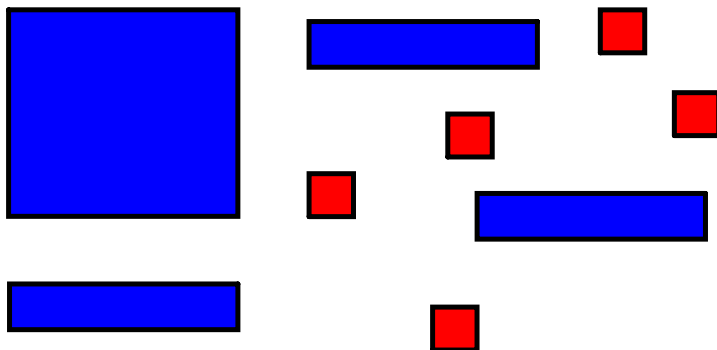


1.9 Like Terms

Explain why each of the following groupings is equal to zero.



Ex. 1 Describe what you see below.



Like Terms: Terms that have the same variables with the same exponent.

Ex. 2: State if the terms are **"like"** or **"unlike"**

- | | | | |
|----------------------------|-------|--------------------|-------|
| a) $5x; -10x; \frac{x}{4}$ | _____ | b) $6ab; -7ba; ab$ | _____ |
| c) $10a; 10b$ | _____ | d) $6ab; 7a$ | _____ |
| e) $10a^2bc^3; -2ba^2c^3$ | _____ | f) $5a^2b; 3b^2a$ | _____ |

Ex. 3 Dylan reaches into a bag of algebra tiles and pulls out a number of blue and red tiles. Simplified, his tiles represent the trinomial $3x^2 - 5x + 4$. What combination of tiles could Dylan have pulled out?

Guiding Questions...

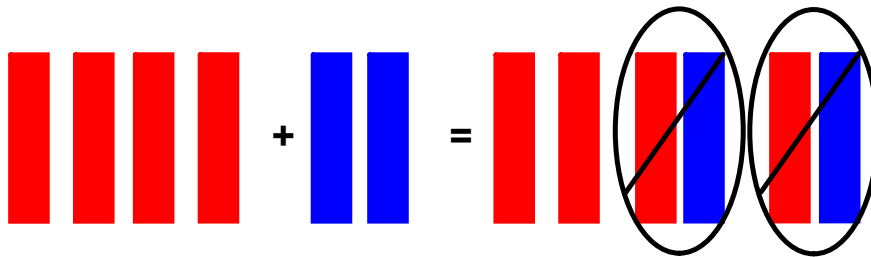
One red x-tile and one blue x-tile combine to make a zero pair. How do zero pairs help simplify an expression?

How could you combine positive and negative tiles to get 3 x^2 -tiles?

How could you combine positive and negative tiles to get -5 x-tiles?

How could you combine positive and negative tiles to get 4 unit tiles?

Ex. 4 Simplify $4x - 2x$.



Q1 The result of $(3x + 4x)$ is $7x^2$.

T/F

Q2 Using tiles, you can remove two zero pairs to simplify $3x + (-2x)$.

T/F

Q3 Like terms have the same variable and the same exponent.

T/F

Q4 $4x - 5 + (-2x) - 3$ simplifies to $2x - 2$.

T/F

Q5 A polynomial with one term is a _____.

A polynomial with two terms is a _____.

A polynomial with three terms is a _____.

We can combine like terms by adding or subtracting their coefficients.

Ex. 2: Simplify.

a) $5b + 4b$

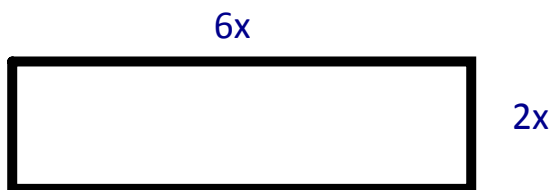
b) $10m - 3m$

c) $10p - 8r$

d) $8x + 2yx$

e) $3x^2 - 2x + 7 - 7x + 5x^2 - 1$

Ex. 3: Find the perimeter and area of the rectangle



Homework
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