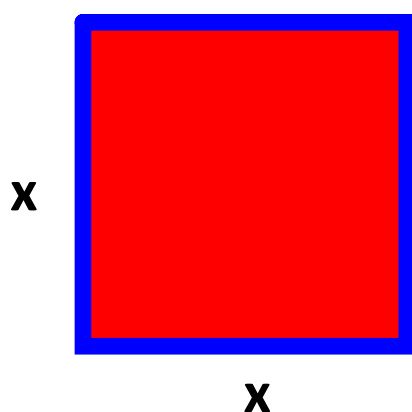


WARM UP PROBLEM (whiteboards)

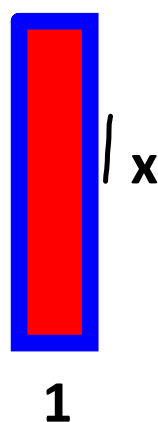
1. Find the **area** of each of the following shapes.

Show your work.

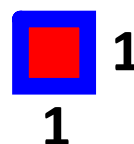
2. Which **colour** represents the area of each shape?



$$\begin{aligned} A &= lw \\ &= x \cdot x \\ &= x^2 \end{aligned}$$



$$\begin{aligned} A &= lw \\ &= 1 \cdot x \\ &= x \end{aligned}$$



$$\begin{aligned} A &= lw \\ &= 1 \cdot 1 \\ &= 1 \end{aligned}$$

$$\begin{aligned} A &= \pi r^2 \\ &= 3.14 \cdot \underbrace{r \cdot r}_{r^2} \end{aligned}$$

$$\text{if } x = 3$$

$$A = 3$$

$$\text{if } x = 10$$

$$A = 10$$

WARM UP PROBLEMS

1. Match each math term to the correct definition.

Term	Definition
	The positive or negative number in the front of the term.
	The letter used to represent an unknown number.
	The coefficient and variable together.
	Terms that have the same variable and exponent, so they can be added or subtracted.

coefficient

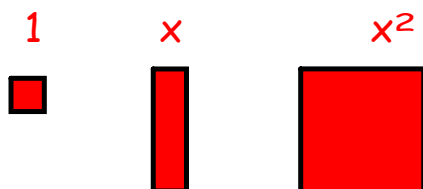
variable

like terms

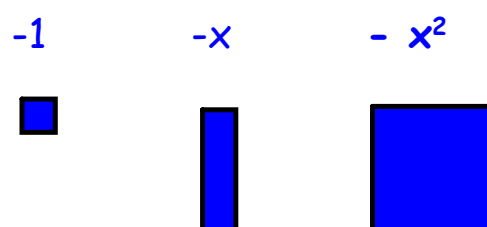
term

2. Match each algebra tile to the correct type of term.

Positive Tiles



Negative Tiles



Try It: Model each expression using algebra tiles.

		$-4x - 2$
		$3x + 2x = 5x$
		$5x - 2x = 3x$
	$6x + 3 =$	$(4x + 2) + (2x + 1)$
	$1x + 4 =$	$(3x + 5) + (-2x - 1)$

Now try the online algebra tile app
(find it on the Google Classroom)

-first try "Modelling Expressions"

-then try "Simplifying Expressions"

OPEN PROBLEM: Algebra Tiles

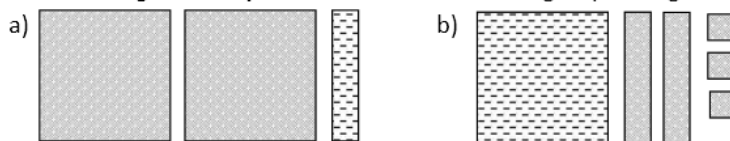
How many different expressions can you model using exactly 5 algebra tiles?

Show each one with algebra tiles and write it on your whiteboard.

Back of ticket

Using Algebra Tiles to Model Expressions Homework

1. Write the **algebraic expression** that each of these groups of algebra tiles represents.



2. Sketch algebra tiles to model each **expression** below.

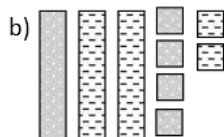
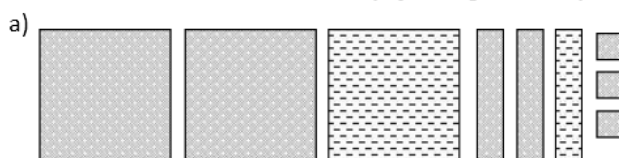
a) $4x - 2$

b) $2x^2 - x - 1$

3. Circle the **like terms** below.

$5x^2$ $7x$ -6 $-11y$ $5y$ y^2

4. Combine **like terms**. Write the **simplified algebraic expression**.



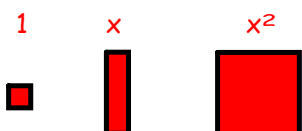
c) $3x^2 - 4x + 2x - 5 + x^2$

d) $7x - 4 + 3x - 1$

5. Write an **algebraic expression** with 5 terms that has only 2 terms when it is simplified.

Algebra Tiles

Positive Tiles



Negative Tiles

