

Combining variables and constants to simplify expressions

## Connect

$$\underline{2}x + 5 + \underline{3}y + \underline{5}x + 10 + \underline{y}$$

variable (unknown value)

variable (different unknown value)

coefficients

constants

**I do**

Simplify the expression below

$$2x + 5 + 3y + 5x + 10 + y$$

**We do**

Jason buys the following items from the vending machine:

Some M&M's for \$2 per bag

Some chips for \$1.50 per bag

\$3 on something he can't remember

Some more chips for \$2 per bag

\$4 on something he can't remember

Some more M&M's for \$2 per bag

Write an expression and then simplify for the amount of money Jason spent

**You do together  
on whiteboard**

Simplify:

$$2y + 4 + 8y + 7a + 10 + a$$

**You do alone on  
index card**

Samantha ran the following days this week:

Monday - 2 laps around Lenora Park

Tuesday - 5 laps around Briscoe Park

Wednesday - 2 laps around Lenora Park

Thursday - 5 miles

Friday - 4 laps around Briscoe park

Saturday - 2.5 miles

Write and simplify an expression for the number of miles Samantha ran