

Writing Variable Expressions: Word Problems

Write a variable expression to model each scenario. Expressions may vary.

1. Samir and Kai are learning how to roller skate at Skate City Roller Rink. Samir has skated y laps around the rink. Kai has skated 4 fewer laps than Samir. Write an expression that shows how many laps Kai has skated around the rink.

$$y - 4$$



2. Ayanna likes to dress up her dog, Cooper, in costumes. Cooper has 8 superhero costumes. Cooper's remaining b costumes are all holiday costumes. Write an expression that shows how many costumes Cooper has in all.

$$8 + b$$

3. Mr. Chen teaches art classes at the community center. To prepare for a watercolor painting class, he bought w new watercolor palettes. He put an equal number of the new palettes on each of the 6 tables in his classroom. Write an expression that shows how many new watercolor palettes are on each table.

$$w \div 6$$

4. The last time Elise visited Adventure Island, she rode her favorite roller coaster, Maximum Velocity, d times. Maximum Velocity has a ride time of 145 seconds. Write an expression that shows how many seconds Elise spent riding Maximum Velocity the last time she visited Adventure Island.

$$145d$$

5. Vince set a goal to practice playing his guitar for r minutes each week. Last week, he practiced his guitar for twice as many minutes as his goal! This week, he was only able to practice his guitar for 20 minutes. Write an expression that shows how many minutes Vince practiced playing his guitar last week and this week combined.

$$2r + 20$$

6. Candace is knitting a scarf that will be 180 rows long. So far, she has been working on the scarf for 8 days, and she has completed t rows each day. Write an expression that shows how many rows Candace still needs to knit to complete the scarf.

$$180 - 8t$$