

5

Simplify the expression: $7x - 3x + 3$	$4x + 3$
	$7x$
	$-4x + 3$
	$13x$

10

Simplify the expression: $11x + 5y - 2y + 4x$	$15x + 3y$
	$16x + 2y$
	$18xy$
	$11x + 7y$

8

Simplify the expression: $4(3r + 2) + 5r$	$17r + 8$
	$32r + 8$
	$12r + 6$
	$17r + 2$

3

Which expression is equivalent? $(5 + 3) \times 7$	$(5 \times 7) + (3 \times 7)$
	$(5 + 7) + (3 + 7)$
	$(5 \times 3) + (5 \times 7)$
	$(5 \times 3) + (3 \times 7)$

6

Which expression is equivalent? 2.1×3.5	$(2 \times 3.5) + (0.1 \times 3.5)$
	$(2 + 3.5) + (0.1 + 3.5)$
	$(2 \times 3) + (0.1 \times 0.5)$
	$(2 \times 0.5) + (0.1 \times 3)$

11

Which expression is equivalent? $(x + 2)(x + 7)$	$(x^2 + 7x) + (2x + 14)$
	$(x + x + 7) + (2 + x + 7)$
	$x^2 + 14$
	$7x + 2x$

1

The length of John's backyard is 50 feet. Which expression can be used to find the length of John's backyard in inches?	50×12
	$50 \div 12$
	$50 + 12$
	$50 - 12$

4

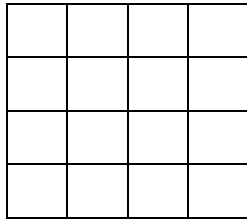
Jake reads 3 pages in 1 minute. At this rate, which expression can be used to find how many pages Jake can read in 1 hour?	$\frac{3 \text{ pages}}{1 \text{ minute}} \times \frac{60 \text{ minutes}}{1 \text{ hour}}$
	$\frac{3 \text{ pages}}{1 \text{ minute}} \times \frac{1 \text{ hour}}{60 \text{ minutes}}$
	$\frac{1 \text{ minute}}{3 \text{ pages}} \times \frac{60 \text{ minutes}}{1 \text{ hour}}$
	$\frac{3 \text{ minutes}}{1 \text{ page}} \times \frac{1 \text{ hour}}{60 \text{ minutes}}$

9

A class has 12 girls and 16 boys. Which expression can be used to find what percentage of the students in the class are boys?	$\frac{16}{28} \times 100\%$
	$\frac{16}{12} \times 100\%$
	$\frac{12}{16} \div 100\%$
	$\frac{16}{28} \div 100\%$

12

Jane wants to shade $\frac{3}{4}$ of the model below.
 Which explanation describes why she multiplies $\frac{3}{4} \times \frac{4}{4}$?



She is finding an equivalent fraction.

She is simplifying the fraction.

She is finding a common denominator.

She is finding the greatest common multiple.

7

Doug has 4 fish and 2 dogs. He buys another fish. How does the additional fish change the ratio of dogs to fish?

The ratio gets smaller because only the denominator increases.

The ratio gets larger because the total number of pets increases.

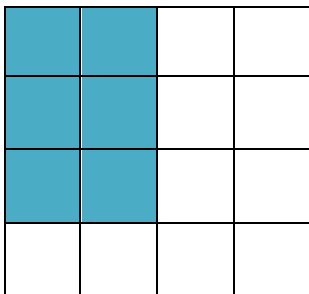
The ratio gets smaller because only the numerator increases.

The ratio gets larger because the number of fish increases.

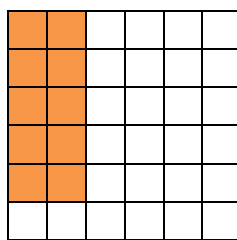
2

Which explanation best describes why Model A represents a larger fraction?

Model A



Model B



The shaded portion of Model A covers more of the total area than Model B.

The total area of Model A is larger than the total area of Model B.

The squares are larger in Model A than the squares in Model B.

There are fewer un-shaded squares in Model A than in Model B.