What a Ratio Says: teacher script

RP01-V1 · RP01 Read and write a ratio · teachers only. Without a screen, read each Say line and draw each Draw step on the board. About 91 seconds as a video.

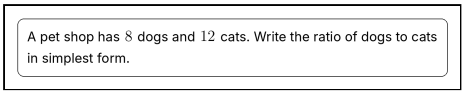
01



Say. What a ratio says. A ratio compares the sizes of two or more amounts. The order follows the words. And to simplify, divide both numbers by the same number.

Draw. Write the title “What a Ratio Says” and the steps: 1. A ratio compares amounts; 2. The order follows the words; 3. Divide or multiply both numbers.

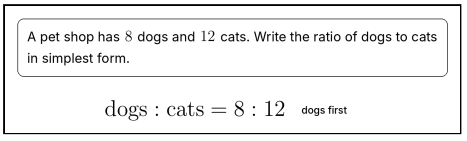
02



Say. A pet shop has 8 dogs and 12 cats. Write the ratio of dogs to cats in simplest form.

Draw. Clear the board. Write “A pet shop has 8 dogs and 12 cats. Write the ratio of dogs to cats in simplest form.” in a box at the top.

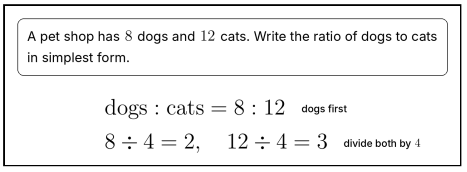
03



Say. Dogs to cats: the dogs come first, so 8 to 12.

Draw. Write dogs : cats = 8 : 12 on the next line. Beside it, write “dogs first”.

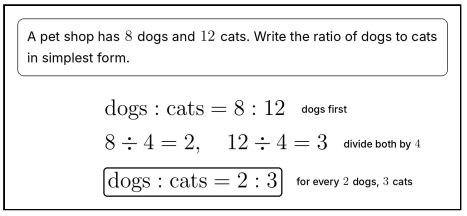
04



Say. Divide both numbers by 4, the largest number that divides both. 8 divided by 4 is 2, and 12 divided by 4 is 3.

Draw. Write 8 ÷ 4 = 2, 12 ÷ 4 = 3 on the next line. Beside it, write “divide both by 4”.

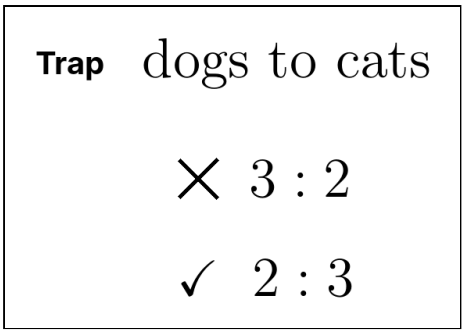
05



Say. So dogs to cats is 2 to 3. For every 2 dogs there are 3 cats.

Draw. Write dogs : cats = 2 : 3 and box it on the next line. Beside it, write “for every 2 dogs, 3 cats”.

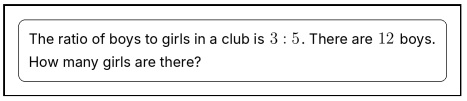
06



Say. Watch for the trap: the wrong order. 3 to 2 would be cats to dogs. In dogs to cats, the dogs come first.

Draw. Clear the board. Write “Trap” and dogs to cats. Below, write 3 : 2 and cross it out ×. Then write 2 : 3 with a tick ✓.

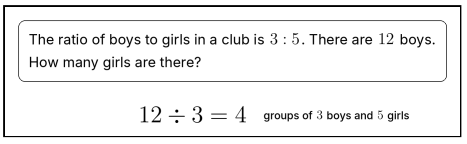
07



Say. The ratio of boys to girls in a club is 3 to 5. There are 12 boys. How many girls are there?

Draw. Clear the board. Write “The ratio of boys to girls in a club is 3 : 5. There are 12 boys. How many girls are there?” in a box at the top.

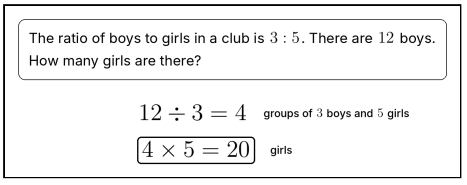
08



Say. The ratio doesn't say how many. The club is made of groups, each with 3 boys and 5 girls, so 12 boys is 4 groups.

Draw. Write 12 ÷ 3 = 4 on the next line. Beside it, write “groups of 3 boys and 5 girls”.

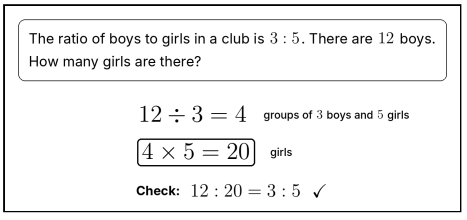
09



Say. Each group has 5 girls: 4 times 5 is 20 girls.

Draw. Write 4 × 5 = 20 and box it on the next line. Beside it, write “girls”.

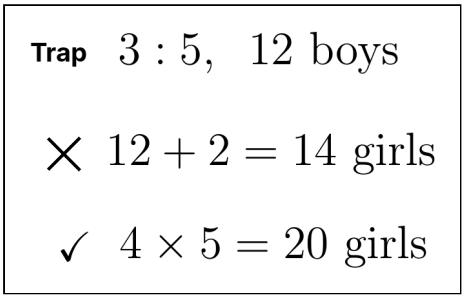
10



Say. Check: 12 to 20, divided by 4, is 3 to 5.

Draw. Below, write “Check: 12 : 20 = 3 : 5” and tick it ✓.

11



Say. Watch for the trap: comparing by taking away. 5 is 2 more than 3, but 14 girls is wrong. Equal ratios come from multiplying: 20 girls.

Draw. Clear the board. Write “Trap” and 3 : 5, 12 boys. Below, write 12 + 2 = 14 girls and cross it out ×. Then write 4 × 5 = 20 girls with a tick ✓.

12

Your turn

The order follows the words.
Divide or multiply both numbers by the same number.

Say. Now it is your turn. The order follows the words, and you divide or multiply both numbers by the same number.

Draw. Point to today’s activity: The order follows the words. Divide or multiply both numbers by the same number.