

The ratio of adult ducks to baby ducks in a pond is 2 to 9.

Use ratio language to describe the ratio relationship between these two quantities.

Equivalent!
Means equal!

Which of the following ratio(s) are equivalent?

9 to 2

Yes or

No

This ratio says 9 adult ducks and 2 baby ducks. This ratio is not equivalent.

$$4 \cdot 9 = 36$$

4 : 18

Yes or

No

$$\frac{4}{18} \div \frac{2}{9} = \frac{2}{9} \cdot \frac{9}{2} = 1$$

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$\frac{8}{36}$

Yes or

No

$$8 \cdot 9 = 72$$

36

$$\frac{8}{36} \div \frac{2}{9} = \frac{8}{36} \cdot \frac{9}{2} = 1$$

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Write three more equivalent ratios that were not used!

$$\frac{2}{9} \cdot \frac{5}{5} = \frac{10}{45}$$

To make equivalent ratios, multiply the top and the bottom number by the same thing.

adult duck to baby ducks

In Ratio Language:

For every 2 adult ducks, there are 9 baby ducks.

$$2 \text{ to } 9, 2:9, \frac{2}{9}$$

Is the ratio 9 to 2 equivalent to 2 to 9?

The ratio 9 to 2 is not equivalent to 2 to 9 because 9 to 2 says: for every 9 adult ducks there are 2 baby ducks.

Is the ratio 4 to 18 equivalent to 4 to 18?

For every 4 adult ducks there are 18 baby ducks.

$$\frac{4}{18} \div \frac{4}{18} = 1$$

Is the ratio 8 to 36 equivalent to 2 to 9?

For every 8 adult ducks there are 36 baby ducks.

$$\frac{8}{36} \div \frac{2}{9} = \frac{8}{36} \cdot \frac{9}{2} = 1$$