

# Ratios

*Problems about ratios.*

**Problem 1** A certain shade of green paint is made by mixing 5 parts of yellow paint with 9 parts of blue paint. How many parts of yellow paint would you need to mix with 1 part blue paint?

You would use  $\frac{5}{9}$  parts yellow paint.  
given

**Problem 2** A certain shade of green paint is made by mixing 12 parts of yellow paint with 4 parts of blue paint. How many parts of blue paint would you need to mix with 1 part yellow paint?

You would use  $\frac{4}{12}$  parts blue paint.  
given

**Problem 3** Two kayakers are traveling at a constant speed. Doug travels 300 meters in 8 minutes, while Phil travels 350 meters in 9 minutes. Who is traveling faster?

**Multiple Choice:**

- (a) Phil travels faster, because he covers about 39 meters per minute. ✓
- (b) Doug travels faster, because he covers about 38 meters per minute.
- (c) Phil travels faster, because he travels farther.
- (d) Doug travels faster, because he travels for fewer minutes.

**Problem 4** Three snails are moving at a constant rate.

- Snail A travels 0 inches in 4 minutes.
- Snail B travels 4 inches in 0 minutes.

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- Snail *C* travels 0 inches in 0 minutes.

How fast does each snail travel one inch? Select all correct answers below.

**Select All Correct Answers:**

- (a) Snail *A* travels 0 inches in 1 minute. ✓
- (b) Snail *B* travels 4 inches in 1 minute.
- (c) Snail *C* travels 0 inches in 1 minute.
- (d) We do not know how far Snail *A* travels in 1 minute.
- (e) We do not know how far Snail *B* travels in 1 minute. ✓
- (f) We do not know how far Snail *C* travels in 1 minute. ✓

**Problem 5** A certain punch is made by mixing 4 cups of fruit juice with 5 cups of sparkling water. Fill in the table below to find how many cups of fruit juice you will need to mix with 19 cups of sparkling water to get a punch in the same recipe.

4	$\frac{4}{5}$ given	$\frac{76}{5}$ given
5	1	19
9	1.8 given	34.2 given