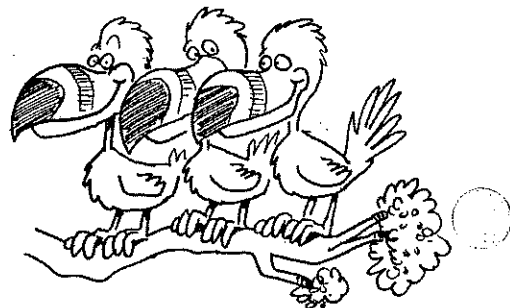


What Do You Call Three Toucans?

Solve the problem, then cross out the letter pair next to your answer (some are rounded). For each letter pair that you DON'T cross out, write the uppercase letter in the box containing the lowercase letter.



1. A boat travels 45 mi upstream (against the current) in 5 h. The boat travels the same distance downstream in 3 h. What is the rate of the boat in still water? What is the rate of the current?
2. When a plane flies into the wind, it can travel 3000 mi in 6 h. When it flies with the wind, it can travel the same distance in 5 h. Find the rate of the plane in still air and the rate of the wind.
3. When Klorina swims with the current, she swims 10 km in 2 h. Against the current, she can swim only 8 km in the same time. How fast can Klorina swim in still water? What is the rate of the current?
4. With the wind, a jet can fly 1500 mi in 2 hr 30 min. Against the wind, it can fly only 1200 mi in the same time. Find the rate of the jet in still air and the rate of the wind.

Answers 1-4

- h • P** 11 mph
4 mph
- f • N** 540 mph
60 mph
- d • R** 550 mph
50 mph
- b • A** 3.8 km/h
1.2 km/h
- g • O** 12 mph
3 mph
- j • C** 610 mph
30 mph
- h • F** 4.5 km/h
0.5 km/h
- e • I** 520 mph
80 mph

5. Traveling upstream on the Missouri River, a barge travels 35 mi in 7 h. Downstream, it travels the same distance in half the time. What is the rate of the barge in still water and the rate of the current?
6. A duck can fly 1800 m in 10 min with the wind. Against the wind, it can fly only two thirds of this distance in 10 min. How fast can the duck fly in still air? What is the rate of the wind?
7. With the wind, a plane flew 1780 mi in 6 h. On the return trip, the pilot was forced to land after 2 h, having traveled only 440 mi. Find the rate of the plane in still air and the rate of the wind.
8. Tommy likes to run up and down an "up" escalator. Going up, he can cover 30 steps in 6 seconds. Going down, it takes him 15 seconds to cover 30 steps. Find Tommy's rate (in steps per second) if the escalator stopped moving.

Answers 5-8

- k • E** 150 m/min
30 m/min
- i • A** 247 mph
49 mph
- j • R** 3.5 steps/s
- i • U** 7.5 mph
2.5 mph
- f • X** 162 m/min
18 m/min
- k • K** 8.5 mph
1.5 mph
- c • T** 258 mph
38 mph
- d • S** 2.8 steps/s

a	b	c	d	e	f	g	h	i	j	k	l
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Identify the variables. Write and solve a system of equations. Write the solution as an ordered pair. Then write the answer including units (\$, pennies, quarters, etc.)

1. Jane has \$2.45 in quarters and dimes in her wallet. She has the same number of quarters as dimes. How many of each does she have?
2. A person gives you coins that total \$3.00. They are all quarters and nickels. If you have 5 times as many nickels as quarters, how many nickels and quarters do you have?
3. A vending machine that takes only dimes and quarters contains 30 coins, with a total value of \$4.20. How many of each coin are there?
4. A collection of nickels and quarters amounts to \$2.60. There are 16 coins in all. How many of each coin are there?
5. For a school play, 340 tickets valued at \$810 were sold. Some cost \$2 and some cost \$3. How many tickets of each kind were sold?