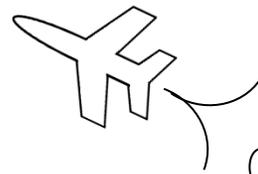


# MAth on the Fly!



NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

## Logarithms

Find the value of each logarithm.

- |    |              |    |              |    |                  |
|----|--------------|----|--------------|----|------------------|
| 1. | $\log_3(81)$ | 2. | $\log_4(64)$ | 3. | $\log_6(6^{10})$ |
| 4. | $\log_7(49)$ | 5. | $\log(1000)$ | 6. | $\log_5(625)$    |
| 7. | $\log_9(9)$  | 8. | $\log_8(1)$  | 9. | $\log_2(32)$     |

Find the value of  $x$  in each equation below.

- |     |                   |     |                              |
|-----|-------------------|-----|------------------------------|
| 10. | $\log_4(x) = 4$   | 11. | $\log(10000) = x$            |
| 12. | $\log_x(512) = 3$ | 13. | $\log_7(x) = -2$             |
| 14. | $\log_3(243) = x$ | 15. | $\log_x(1024) = 10$          |
| 16. | $\log_x(29) = 1$  | 17. | $\log_{36}(x) = \frac{1}{2}$ |

## SOLUTIONS

1. 4

2. 3

3. 10

4. 2

5. 3

6. 4

7. 1

8. 0

9. 5

10.  $x = 256$

11.  $x = 4$

12.  $x = 8$

13.  $x = \frac{1}{49}$

14.  $x = 5$

15.  $x = 2$

16.  $x = 29$

17.  $x = 6$