



Puzzle Time

What Do You Give A Dog That Loves Computers?

Write the letter of each answer in the box containing the exercise number.

Simplify the expression. Write the answer as a power.

1. $\frac{8^{12}}{8^6}$

2. $\frac{3^{24}}{3^{15}}$

3. $\frac{7^{14}}{7^4}$

4. $\frac{3^7}{3^4}$

5. $\frac{4^{12}}{4^5}$

6. $\frac{9^8}{9^3}$

7. $\frac{3^4 \cdot 3^5}{3^2 \cdot 3^2}$

8. $\frac{8^{15}}{8^7 \cdot 8}$

9. $\frac{4^5 \cdot 4^9}{4^3 \cdot 4^3}$

10. $\frac{9^{14} \cdot 9^5}{9^7}$

11. $\frac{7^3 \cdot 7^9}{7^2 \cdot 7}$

12. $\frac{3^{15} \cdot 3^8}{3^9 \cdot 3^6}$

13. There are about $4 \cdot 10^5$ known species of beetles. The number of known species of caddis flies is about 10^4 . How many times more species of beetles are there than caddis flies?

14. The area of the Pacific Ocean is approximately $64 \cdot 10^6$ square miles. The area of the Gulf of Mexico is approximately 10^5 square miles. How many times greater is the area of the Pacific Ocean than the area of the Gulf of Mexico?

Answers

Y. 3^3

D. 9^{12}

I. 4^7

D. 7^9

E. 9^5

E. 3^9

T. 40

G. 8^7

O. 7^{10}

S. 4^8

S. 8^6

K. 640

T. 3^5

G. 3^8

11	3	8	12	4		10	5	9	14	6	7	13	2	1
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