Math Antics
Worksheets

Exponent Form

Instructions: Rewrite each repeated multiplication in exponent form.
(Note: You do NOT need to acctually do the multiplication in these problems.)

1 $2 \times 2 \times 2 \times 2 =$ 2^4

2 $5 \times 5 \times 5 \times 5 =$ _____

3 $15 \times 15 =$ _____

4 $7 \times 7 \times 7 \times 7 \times 7 =$ _____

5 $20 \times 20 \times 20 =$ _____

6 $8 \times 8 \times 8 \times 8 \times 8 \times 8 \times 8 =$ _____

7 $32 \times 32 \times 32 \times 32 \times 32 =$ _____

8 $4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 =$ _____

9 $10 \times 10 \times 10 \times 10 \times 10 =$ _____

10 $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 =$ _____

11 $1.6 \times 1.6 \times 1.6 \times 1.6 \times 1.6 =$ _____

12 $0.5 \times 0.5 \times 0.5 =$ _____

13 $614 \times 614 \times 614 \times 614 =$ _____

14 $11 \times 11 \times 11 \times 11 \times 11 \times 11 \times 11 =$ _____

15 $12.4 \times 12.4 =$ _____

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Math Antics Worksheets

Name: _____

Date: _____

Calculating "Squares"

Instructions: Use a multiplication table to find the value of each "square".

1 $5^2 =$ <u> 25 </u>   **2** $4^2 =$ _____

3 $6^2 =$ _____   **4** $9^2 =$ _____

5 $7^2 =$ _____   **6** $1^2 =$ _____

7 $3^2 =$ _____   **8** $8^2 =$ _____

9 $10^2 =$ _____   **10** $11^2 =$ _____

11 $12^2 =$ _____   **12** $0^2 =$ _____

Instructions: Use a calculator to calculate the value of each "square".

1 $15^2 =$ <u> 225 </u>   **2** $14^2 =$ _____

3 $20^2 =$ _____   **4** $16^2 =$ _____

5 $13^2 =$ _____   **6** $24^2 =$ _____

7 $30^2 =$ _____   **8** $18^2 =$ _____

9 $40^2 =$ _____   **10** $120^2 =$ _____

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Name: _____

Date: _____

Calculating Exponents

Instructions: Use a calculator to calculate the value of each exponent. (Note: Try to find a calculator that has the special exponent function (x^y) that we mentioned in the video, but if you can't, then just use the calculator to help you repeat the multiplication.)

1 $2^5 =$ _32_

2 $4^3 =$ _____

3 $4^4 =$ _____

4 $3^3 =$ _____

5 $5^3 =$ _____

6 $6^3 =$ _____

7 $2^8 =$ _____

8 $7^3 =$ _____

9 $3^5 =$ _____

10 $10^3 =$ _____

11 $8^4 =$ _____

12 $5^5 =$ _____

13 $2^{10} =$ _____

14 $9^3 =$ _____

15 $3^6 =$ _____

16 $12^3 =$ _____

17 $15^3 =$ _____

18 $11^4 =$ _____

19 $6^5 =$ _____

20 $3^{10} =$ _____

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math Antics®
Worksheets

Powers of Two

Instructions: Computers use a number system that has only two digits: 1 and 0. This number system is called "Binary" or "Base-2". Because this number system has only two digits, **powers of two** (which are exponents with 2 as the base) are very important in computer science. On this page, calculate the first ten powers of two.

1 $2^1 = 2 = \underline{\quad 2 \quad}$

2 $2^2 = 2 \times 2 = \underline{\quad\quad}$

3 $2^3 = 2 \times 2 \times 2 = \underline{\quad\quad}$

4 $2^4 = 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$

5 $2^5 = 2 \times 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$

6 $2^6 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$

7 $2^7 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$

8 $2^8 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$

9 $2^9 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$

10 $2^{10} = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 = \underline{\quad\quad}$