

Advanced 860

Prof 329

Basic 300

Below Basic 150

3-6

$$4^2 = 4 \times 4 = 16$$

↑ Exponent

— Base

$$5^5 = 5 \times 5 \times 5 \times 5 \times 5$$

$$25 \times 5$$

$$125 \times 5$$

$$625 \times 5$$

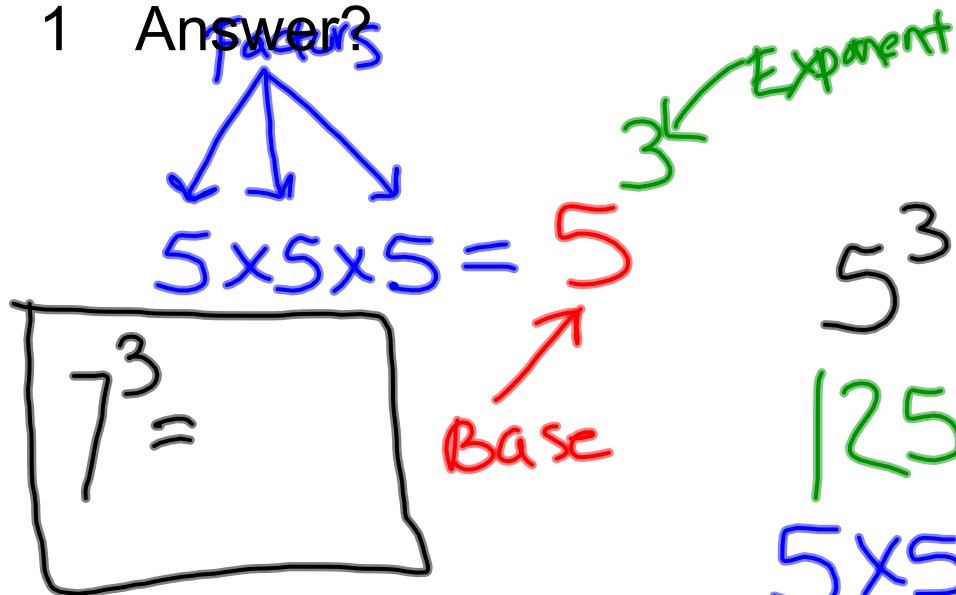
$$3125$$

Exponent: is the number that tells how many times the base is used as factor

Base: is the number to be multiplied 4
 — Base

Math Notes

1 Answer?



5^3 Exponential notation
 125 Standard form
 $5 \times 5 \times 5$ Expanded form

2^5 Standard form

$2 \times 2 \times 2 \times 2 \times 2 = 32$

4×2

$8 \times 2 \times 2$

16×2

2 Answer?

Standard form.

$$\underline{10}^{\underline{4}}$$

expanded

$$\underline{10 \times 10 \times 10 \times 10}$$

$$100 \times 10$$

$$1000 \times 10$$

$$10000$$

exponential notation

$$\underline{4} \times \underline{4} \times \underline{4} = 4^3$$

expanded form

1. 3^5

$3 \times 3 \times 3 \times 3 \times 3$

Standard form

2. 2^4

$2 \times 2 \times 2 \times 2 = 16$

4×2

\checkmark
 8×2

\checkmark
 16

Cubed = to the third power 5^3 exponent
Squared = to the second power 5^2 exponent

Lesson 3-7
problem solving
Multiple-Step Problems

① 12 eggs in 1 dozen
How many eggs in 3 dozen?

$$\begin{array}{r} + 12 \times 12 \\ 12 \times 3 \\ \hline 12 \quad 36 \\ \hline 36 \quad 36 \end{array}$$

3 Answer?

3 tickets for \$1.75 each,

$$\begin{array}{r} 2 \overset{1}{1.75} \\ \times \quad 3 \\ \hline \$5.25 \end{array}$$
$$\begin{array}{r} 2 \overset{1}{1.75} \\ + 1.75 \\ + 1.75 \\ \hline 5.25 \end{array}$$

4 Answer?

\$5.25 \$10.00

How much change does she get back?

$$\begin{array}{r} \overset{0}{\cancel{10}}.\overset{9}{\cancel{00}} \\ - 5.25 \\ \hline \$4.75 \end{array}$$

5 Answer?

T-shirt / \$5.00 off
T-shirt originally cost. \$14.50
Cap cost. \$7.95

$$\begin{array}{r} \text{SEP} \textcircled{1} \\ \$14.50 \\ - 5.00 \\ \hline \$9.50 \end{array}$$

$$\begin{array}{r} \$9.50 \\ 7.95 \\ \hline \$17.45 \end{array}$$

6 Answer?

Handwritten calculations for a multi-step problem:

Items and prices:

- 🍷 1.29 (3lb)
- 🍷 ~~3.29~~ (1pt) ←
- 🍷 0.92 (2lb)
- 🍷 ~~5.65~~ (each) ←

Step 1 calculation:

$$\begin{array}{r} \text{step 1 } \$3.29 \\ - \quad .45 \\ \hline \$2.84 \end{array}$$

Step 2 calculation:

$$\begin{array}{r} \text{step 2 } \$5.65 \\ - \quad .35 \\ \hline \$5.30 \end{array}$$

3 step calculation:

$$\begin{array}{r} \text{3 step: } 1.29 \\ + 2.84 \\ + 0.92 \\ \hline \$5.30 \\ \hline \$170.35 \end{array}$$