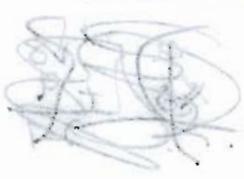


$$\begin{array}{r} 2105 \\ 212 \\ 213 \\ \hline 2105 \end{array}$$



$$\begin{array}{r} 257 \\ 257 \\ 257 \\ \hline 257 \end{array}$$

December 14, 1993

2^3 of a meter is 39 cm 3 meters =
 9 bows, 9 meters = 27 bows, 27 meters = 81 bows
 81 meters = 243, 243 meters = 729, 729 meters =
 2,187, 2,187 meters = 6561, 6561 meters =
 19683, 19683 = 59049, 59049 meters =
 177147, 177147 meters = 531441, 531441 meters
 = 1594323, 1594323 meters = 4782969,
 4782969 meters = 14348907, 14348907
 meters = 43046721, 43046721 meters
 = 1,29140161, 1,29140161 meters = 3,874,2698.

~~$$\begin{array}{r} 1091261 \\ 1091261 \\ 1091261 \\ \hline 1091261 \end{array}$$~~

~~$$\begin{array}{r} 820458 \\ 820458 \\ 820458 \\ \hline 820458 \end{array}$$~~

~~$$\begin{array}{r} 240522 \\ 240522 \\ 240522 \\ \hline 240522 \end{array}$$~~

~~$$\begin{array}{r} 721580 \\ 721580 \\ 721580 \\ \hline 721580 \end{array}$$~~

~~$$\begin{array}{r} 216821 \\ 216821 \\ 216821 \\ \hline 216821 \end{array}$$~~

~~$$\begin{array}{r} 650522 \\ 650522 \\ 650522 \\ \hline 650522 \end{array}$$~~

~~$$\begin{array}{r} 1951261 \\ 1951261 \\ 1951261 \\ \hline 1951261 \end{array}$$~~

~~$$\begin{array}{r} 575379 \\ 575379 \\ 575379 \\ \hline 575379 \end{array}$$~~

~~$$\begin{array}{r} 1726137 \\ 1726137 \\ 1726137 \\ \hline 1726137 \end{array}$$~~

~~$$\begin{array}{r} 5178411 \\ 5178411 \\ 5178411 \\ \hline 5178411 \end{array}$$~~

$$\begin{array}{r}
 729 \\
 729 \\
 +729 \\
 \hline
 2187
 \end{array}$$



$$\begin{array}{r}
 81 \\
 81 \\
 +81 \\
 \hline
 243
 \end{array}
 \qquad
 \begin{array}{r}
 16 \\
 8 \\
 \hline
 4
 \end{array}
 \qquad
 \begin{array}{r}
 243 \\
 243 \\
 \hline
 729
 \end{array}$$

2854419991

1 meter = 100 centimeters
 1 meter = 1000 millimeters
 1 meter = 1000000 micrometers
 1 meter = 1000000000 nanometers
 1 meter = 1000000000000 picometers
 1 meter = 1000000000000000 femtometers
 1 meter = 1000000000000000000 attometers
 1 meter = 1000000000000000000000 zeptometers
 1 meter = 1000000000000000000000000 yoctometers

$$\begin{array}{r}
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 1.2914016 \\
 +1.2914016 \\
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 3.8742048 \\
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 7.7484096 \\
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 \hline
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Jacqueline
Math



12/14/93
4-Ph

1. $3 \text{ meters} \times 3 \text{ meters} = 9 \text{ meters}$
 $3 \text{ meters} + 3 \text{ meters} + 3 \text{ meters} = 9 \text{ m}$

2. $9 \times 3 = 27 \text{ m}$

3 $27 \times 3 = 81 \text{ m}$

4 $81 \times 3 = 243 \text{ m}$

$$\begin{array}{r} 1 \\ 5 \times 243 \\ \hline 729 \end{array}$$

$$\begin{array}{r} 2 \\ 6 \times 729 \\ \hline 2187 \end{array}$$

$$\begin{array}{r} 3 \\ 7 \times 2,187 \\ \hline 6561 \end{array}$$

$$\begin{array}{r} 6561 \\ \times 3 \\ \hline 19683 \\ 222 \\ \times 19683 \\ 2 \\ \hline 59039 \\ \times 3 \\ \hline 177147 \\ \times 3 \\ \hline \del{54144} \\ \del{54144} \\ 54144 \end{array}$$

$$\begin{array}{r} 54441 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1624323 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4872989 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 14678987 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 43856721 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 131570143 \\ \times 3 \\ \hline \end{array}$$

~~123456789~~

~~123456789~~

~~123456789~~

igoodly unimpaired
water

3 meters x 3 meters = 9 meters
3 meters + 3 meters + 3 meters = 9 meters

$$m \ 55 = 3 \times p \ 8$$

$$m \ 18 = 3 \times 72 \ 3$$

$$m \ 846 = 3 \times 18 \ 4$$

$$\frac{123456789}{3}$$

$$\frac{123456789}{3}$$

$$\frac{123456789}{3}$$

Andra

Dec. 14, 1993

A third of a meter is 39 centimeters.

3 meters = 9 bows

9 meters = 27 bows

27 meters = 81 bows

81 meters = 243 bows

243 meters = 729 bows

729 meters = 2,187 bows

2,187 meters = 6,561 bows

6,561 meters = 19,683 bows

19,683 meters = 59,049 bows

59,049 meters = 177,147 bows

177,147 meters = 531,441 bows

531,441 meters = 1,594,323 bows

1,594,323 meters = 4,782,969 bows

4,782,969 meters = 14,348,907 bows

14,348,907 meters = 43,046,721 bows

43,046,721 meters = 129,140,163 bows

129,140,163 meters = 387,426,489 bows

387,426,489 meters = 1,162,279,467 bows

1,162,279,467 meters = 3,504,847,722 bows

3,504,847,722 meters = 9,514,999,772 bows

9,514,999,772 meters = 28,544,999,1 bows

and on, and on, and on, and on...

$$\begin{array}{r}
 +1 \\
 243 \\
 243 \\
 +243 \\
 \hline
 729
 \end{array}$$

$$\begin{array}{r}
 +1 \\
 27 \\
 27 \\
 +27 \\
 \hline
 81
 \end{array}
 \qquad
 \begin{array}{r}
 81 \\
 81 \\
 +81 \\
 \hline
 243
 \end{array}$$

$$\begin{array}{r}
 +2 \\
 729 \\
 729 \\
 +729 \\
 \hline
 2187
 \end{array}$$

Jessica
Math

Dec 14, 1993
4-Phillips

I think you can
make 3 bows out of one
meter ribbon. Out of 3 meters
ribbon you can make
9 bows. Out of 9 meters
you can make 27 bows.
Out of 27 meters you can
make ~~81~~ 81 bows. Out of ~~78~~ 81
meters you can make ~~240~~ 243 bows.



20

~~27~~

x 3

81

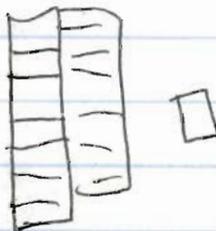
x 3
27

2 27
27
27

81

3 x 7 = 21

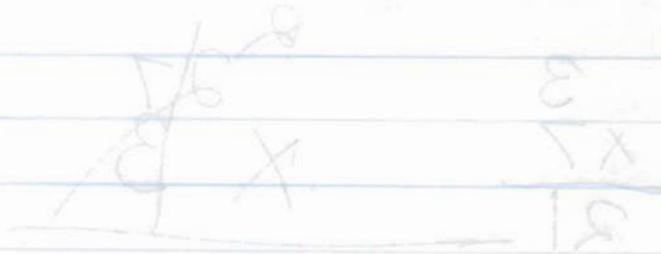
3
x 7
21



Both
Maths

December 14, 1993
4-Phillips

I think you can make 3 bow
out of 1. Out of 3 meters you
can make 9 bows. Out of 9 meters
you can make 27 bows. Out of
27 meters you can make 81 bows.
Out of 81 meters you can make
243 bow.



B

$$\begin{array}{r} 2 \\ 27 \\ + 27 \\ \hline 27 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array}$$

~~$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$~~

Andrew
Math



1/3rds

12/14/93

- ① 3 meters ~~✗~~ X 3 meters = 9m.
- ② 9 meters x 3 meters = 27 meters
- ③ 27 meters x 3 meters = 81 meters
- ④ 81 meters x 3 meters = 243 meters
- ⑤ 243 meters x 3 meters = 729 meters
- ⑥ 729 meters x 3 meters = 2,187 meters
- ⑦ 2,187 meters x 3 meters = 6,561m.
- ⑧ 6,561 meters x 3 meters = 18,683^am.
- ⑨ 18,683^a meters x 3 meters = 58,049^am.
- ⑩ 58,049^a meters x 2 meters = 158,147^am.
- ⑪ 158,147^a meters x 3 meters = 524,441^am.
- ⑫ 524,441^a meters x 3 meters = 1,594,323^a

- ⑬ $1,599,323 \text{ meters} \times 3^1 = 4,782,969 \text{ m.}$
- ⑭ $4,782,969 \text{ meters} \times 3^1 = 14,348,907 \text{ m.}$
- ⑮ $14,348,907 \text{ meters} \times 3^1 = 43,046,721 \text{ m.}$
- ⑯ $43,046,721 \text{ meters} \times 3 \text{ meters} = 129,140,163 \text{ m.}$
- ⑰ $129,140,163 \text{ meters} \times 3 \text{ meters} = 387,420,489 \text{ m.}$
- ⑱ $387,420,489 \text{ meters} \times 3 \text{ meters} = 1,162,261,467 \text{ m.}$
- ⑲ $1,162,261,467 \text{ meters} \times 3 \text{ meters} = 3,486,784,401 \text{ m.}$
- ⑳ $3,486,784,401 \text{ meters} \times 3 \text{ meters} = 10,460,353,203 \text{ m.}$

James

12/14/93

- ① 3 meters \times 3 meters = 9 m.
- ② 3 meters \times 9 meters = 27 m.
- ③ 3 meters \times 27 meters = 81 m.
- ④ 81 meters \times 3 meters = 243 m.
- ⑤ 243 meters \times 3 meters = 729 m.
- ⑥ 729 meters \times 3 meters = 2,187 m.
- ⑦ 2,187 meters \times 3 meters = 6,561 m.
- ⑧ 6,561 meters \times 3 meters = 19,683 m.
- ⑨ 19,683 meters \times 3 meters = 59,049
- ⑩ 59,049 meters \times 3 meters = 177,147
- ⑪ 177,147 meters \times 3 meters = 531,441
- ⑫ 531,441 meters \times 3 meters = 1,594,323

- James [REDACTED]
- 13 $1544,323 \text{ meters} \times 3 \text{ meters} = 4782969$
 - 14 $4782969 \text{ meters} \times 3 \text{ meters} = 14,348,907$
 - 15 $14,348,907 \text{ meters} \times 3 \text{ meters} = 43,046,721$
 - 16 $43,046,721 \text{ meters} \times 3 \text{ meters} = 129,140,163$
 - 17 $129,140,163 \text{ meters} \times 3 \text{ meters} = 387,420,489$
 - 18 $387,420,489 \text{ meters} \times 3 \text{ meters} = 1,162,261,467$
 - 19 $1,162,261,467 \text{ meters} \times 3 \text{ meters} = 3,486,784,401$
 - 20 $3,486,784,401 \text{ meters} \times 3 \text{ meters} = 10,460,353,203$

1
Laura
Math bows

Dec. 14, 1993
41-Phillips

I think you can make 3 bows
out of 1 meter. Out of 3 meters you
can make 9 bows. Out of 9 meters
you can make 27 bows. Out of
27 meters you can make ~~81~~ bows.
Out of ~~81~~ meters you can make
~~243~~ bows.

~~27~~
~~81~~
~~243~~

~~8~~
~~27~~
~~81~~
~~243~~
~~729~~
~~2187~~
~~6561~~
~~19683~~
~~59049~~
~~177147~~
~~531441~~
~~1594323~~
~~4782969~~
~~14348907~~
~~43046721~~
~~129140163~~
~~387420489~~
~~1162261467~~
~~3486784401~~
~~10460353203~~
~~31381059609~~
~~94143178827~~
~~282429536481~~
~~847288609443~~
~~2541865828329~~
~~7625597484987~~
~~22876792454961~~
~~68630377364883~~
~~205891132094649~~
~~617673396283947~~
~~1853020188851841~~
~~5559060566555523~~
~~16677181699666571~~
~~50031545098999717~~
~~149094635296999151~~
~~447283905890997453~~
~~1341851717672992359~~
~~4025555153018977077~~
~~12076665459056931231~~
~~35829996377170793693~~
~~106589989131512381079~~
~~319769967394537143237~~
~~959309902183611429711~~
~~287792970655083428913~~
~~863378911965250286739~~
~~2590136735895750860217~~
~~7770409207687252580651~~
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~~18908194375580023770963~~
~~56724583126740071310889~~
~~170173749380220213932667~~
~~510521248140660641798001~~
~~1501563744421981925194043~~
~~4504691233265945775582129~~
~~1351407370000000000000000~~

$$\begin{array}{r}
 27 \\
 27 \\
 27 \\
 \hline
 +27 \\
 \hline
 81
 \end{array}$$

$$\begin{array}{r}
 3 \\
 \times 7 \\
 \hline
 21
 \end{array}$$

$$\begin{array}{r}
 +2 \\
 27 \\
 \times 3 \\
 \hline
 81
 \end{array}$$

3	101
6	104
9	107
12	110
15	113
18	116
21	119
24	122
27	125
30	128
33	131
36	134
39	137
42	140
45	143
48	146
51	149
54	151
57	154
60	157
63	160
66	163
69	166
72	169
75	172
78	175
81	178
84	
87	
90	
93	
96	
99	

2
5

33

Erin
Math

12/14/03
Mrs. Phillips

If there is 9 meters of ribbon and each bow is $\frac{1}{3}$ then you can make 27 bows because $9 \times 3 = 27$.

Michael



12/13/93

~~31~~ ~~27~~ Math Rows

4-Phillips

$$\begin{array}{r} 3 \\ 3 \\ + 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 19,683 \\ \times 3 \\ \hline 59,049 \end{array}$$

$$\begin{array}{r} 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ + 3 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 81 \\ \times 3 \\ \hline 243 \end{array}$$

$$\begin{array}{r} 59,049 \\ \times 3 \\ \hline 177,147 \end{array}$$

$$\begin{array}{r} 243 \\ \times 3 \\ \hline 729 \end{array}$$

$$\begin{array}{r} 177,147 \\ \times 3 \\ \hline 531,441 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 729 \\ \times 3 \\ \hline 2187 \end{array}$$

$$\begin{array}{r} 531,441 \\ \times 3 \\ \hline 1,594,323 \\ \times 3 \\ \hline 4,782,969 \end{array}$$

$$\begin{array}{r} 2187 \\ \times 3 \\ \hline 6561 \end{array}$$

$$\begin{array}{r} 14349907 \\ \times 3 \\ \hline 43049721 \end{array}$$

$$\begin{array}{r} 6561129140163 \\ \times 3 \\ \hline 19,683 \end{array}$$

Michael [REDACTED]

$$\begin{array}{r} 129,140,163 \\ \times \quad \quad \quad 3 \\ \hline 387,420,489 \\ \times \quad \quad \quad 3 \\ \hline 1,162,262,867 \\ \times \quad \quad \quad 3 \\ \hline 3,486,786,801 \\ \times \quad \quad \quad 3 \\ \hline 10,460,360,403 \\ \times \quad \quad \quad 3 \\ \hline 31,381,081,209 \\ \times \quad \quad \quad 3 \\ \hline 94,143,243,627 \\ \times \quad \quad \quad 3 \\ \hline 282,429,730,881 \\ \times \quad \quad \quad 3 \\ \hline 847,289,192,643 \end{array}$$

Amy
Math

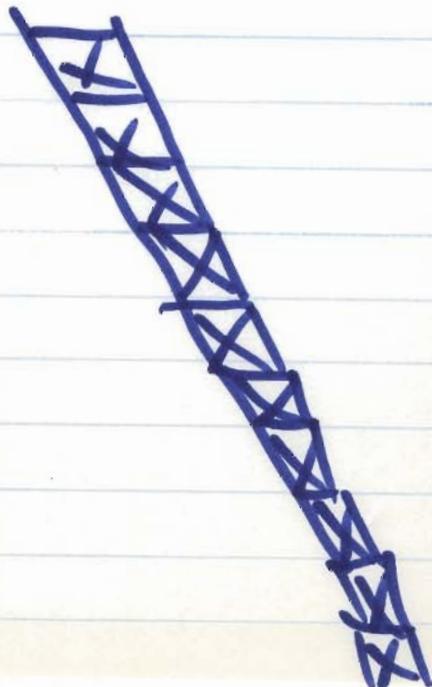
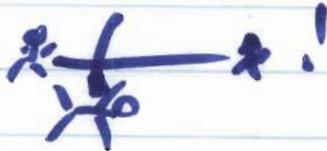
12/14/93

\$ 9	847.23921
27	2.541.7176
81	7625.1529
243	2.2875.459
729	6.8626.376
2187	2.05879.13
6561	6.17637.38
19683	1.8529.10
59049	5.558736.40
177147	1.6676209
531441	5.0028628
1594323	1.5.008588
4782969	45.025765
1434807	135.0773
4304421	405.23189
1.2913263	1215.6957
38739189	3647.087
1.1.621937	1.0941261
34865811	32823.783
10459743	98471.3483
3137923	295414.05
44.13769	88624214
2.82.41307	2.658726.40

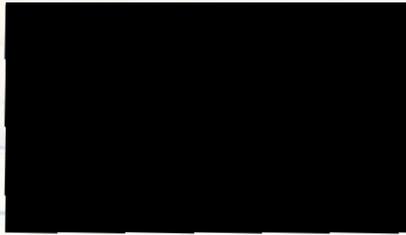
Caitlin
Math.

December 14, 1988
4 Phillips

If there are 9 meters of ribbon
and each ribbon is $\frac{1}{3}$ of
a meter you can make 27
ribbons.



Caitlin
Math



December 14, 2003
H. Phillips

[Faint, mirrored handwriting, likely bleed-through from the reverse side of the page]



Kimberly [redacted] Dec. 14, 1993

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array} \quad \begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

$$3 \times 7 = 21$$

~~27~~ ~~27~~ ~~27~~

$$1 \times \begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array} + 20 = 81$$

Brian F

Dec. 14

Math

1

$$\begin{array}{r} 3m \\ \times 3m \\ \hline 9 \end{array}$$

$$\begin{array}{r} 2187 \\ \times 3 \\ \hline 6561 \end{array}$$

$$\begin{array}{r} 43046721 \\ \times 3 \\ \hline 18530201 \end{array}$$

2

$$\begin{array}{r} 9 \\ \times 3 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 6561 \\ \times 3 \\ \hline 19683 \end{array}$$

$$\begin{array}{r} 55590603 \\ \times 3 \\ \hline 1.667718 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 19683 \\ \times 3 \\ \hline 59049 \end{array}$$

$$\begin{array}{r} 5.03154 \\ \times 3 \\ \hline 15.09462 \end{array}$$

$$\begin{array}{r} 81 \\ \times 3 \\ \hline 243 \end{array}$$

$$\begin{array}{r} 177147 \\ \times 3 \\ \hline 531441 \end{array}$$

$$\begin{array}{r} 42.28386 \\ \times 3 \\ \hline 135.85158 \end{array}$$

$$\begin{array}{r} 243 \\ \times 3 \\ \hline 729 \end{array}$$

$$\begin{array}{r} 1594323 \\ \times 3 \\ \hline 4782969 \end{array}$$

$$\begin{array}{r} 407.755474 \\ \times 3 \\ \hline 1222.6642 \end{array}$$

$$\begin{array}{r} 729 \\ \times 3 \\ \hline 2187 \end{array}$$

$$\begin{array}{r} 14348907 \\ \times 3 \\ \hline 43046721 \end{array}$$

$$\begin{array}{r} 3667.9927 \\ \times 3 \\ \hline 11003.978 \end{array}$$

Sarah



Dec. 14, 1993

Math Rows 4- Mrs Phillips.

531,441

~~Math~~
~~9~~
~~3~~
~~27~~
~~9~~

3	3	3
3	3	3
+ 3	3	3
9	9	9
x 3	x 3	x 3
27	27	27
x 3	x 3	x 3
81	81	81
x 3	x 3	x 3
243	243	243
x 3	x 3	x 3
729	729	729
x 3	x 3	x 3
2187	2187	2187
x 3	x 3	x 3
6561	6561	6561
x 3	x 3	x 3
19683	19683	19683
x 3	x 3	x 3
59049	59049	59049
x 3	x 3	x 3
177147	177147	177147
x 3	x 3	x 3
531441	531441	531441

A.L.

'93

1. $\begin{array}{r} \overline{27} \\ \times 3 \\ \hline \end{array} = 20 \times 3 = 60$

2. $\begin{array}{r} \overline{27} \\ \times 3 \\ \hline \end{array} = 7 \times 3 = 21$

3. $\begin{array}{r} 60 \\ + 21 \\ \hline 81 \end{array}$

$$1 \div \frac{1}{2} = 2$$

$$1 \div \frac{1}{3} = 3$$

$$1 \div \frac{1}{4} = 4$$

$$1 \div \frac{1}{5} = 5$$

$$1 \div \frac{1}{10} = 10$$

$$2 \div \frac{1}{2} = 4$$

$$2 \div \frac{1}{3} = 6$$

$$2 \div \frac{1}{4} = 8$$

$$2 \times 3 = 6$$

3, 4

$$3 \div \frac{1}{3} = 3 \times 3 = 9$$

$$3 \div \frac{1}{3} = 3 + 3 + 3 = 9$$

$$9 \div \frac{1}{3} = 27$$

$$9 \div \frac{1}{3} = 9 \times 3 = 27$$

$$9 \div 3 = 3$$

If there are 9 meters
of ribbon and each ribbon
is $\frac{1}{3}$ of a meter you
can make 27 ribbons

Erika
David



3 meters of ribbon
bows are $\frac{1}{3}$ of a meter
How many bows can we make?

9 meters of ribbon
bows are $\frac{1}{3}$ of a meter
How many bows?

9 meters of ribbon
bows are 3 meters
How many bows?

27 meters of ribbon
bows are 3 m; $\frac{1}{3}$ m
How many bows?

$$\begin{array}{r}
 1. \quad 27 \\
 \times 3 \\
 \hline
 2. \quad 20 \\
 \times 3 \\
 \hline
 60
 \end{array}$$

$$\begin{array}{r}
 3. \quad 7 \\
 \times 3 \\
 \hline
 21
 \end{array}$$

$$4. \quad 21 + 60 = 81$$

I did the problem this way because it would be easier to understand.

In step 1, you take the 7 off the 27 and you get 20.

In step 2, you do this. You multiply 20 three times and you get 60.

In step 3, you now only have the 7 left, so, you multiply 7×3 and get 21.

In step 4, you add your 2 answers, 60 and 21 and get 81.

947, 289, 194, 643

Michael



12/13/43

Math Bows

I timesd every thing by 3.
 For eremple $3 \times 3 = 9 \times 3 = 27 \times 3 = 81$.
 I did this because there are
 $3 \frac{1}{3}$ in a meter and you
 take the 3 and times it
 by ~~whatever~~ ~~number~~
 of meters you have so
 I kept doing that and
 got alot of answers. I
 think this works because it
 takes $3 \frac{1}{3}$ to equal a whole
 (or meter) and then you have
 a certain amount of meters
 and you times that by 3 because
 it it takes $3 \frac{1}{3}$ to equal
 a meter.

Laura
Math

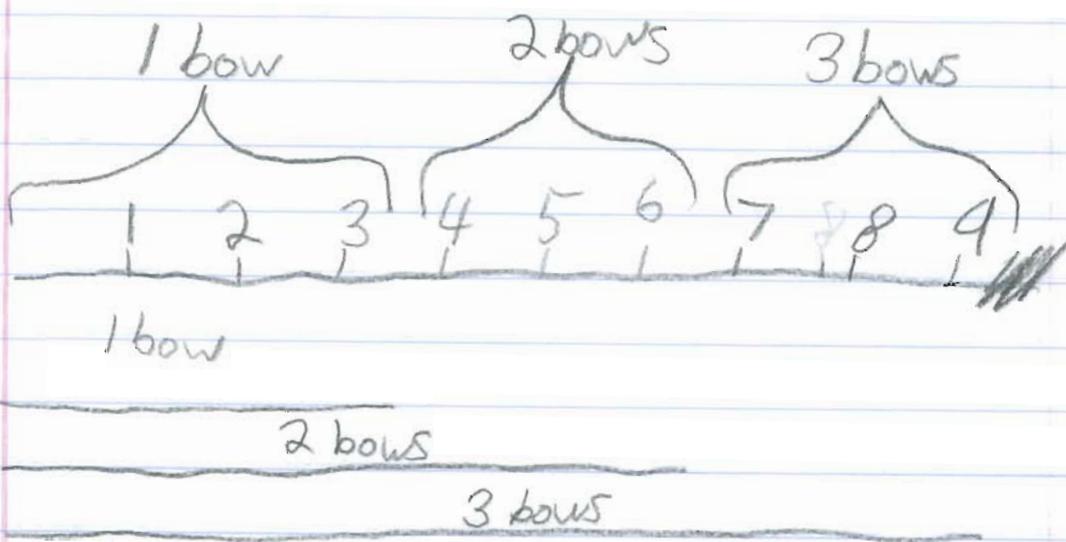
Dec. 14, 1993
4-Phillips

- 1) I think out of 1 meter you can make 3 bows. I think this because there are 3 $\frac{1}{3}$'s in 1 meter.
- 2) I think out of 3 meters you can make 9 bows. I think this because there are 9 $\frac{1}{3}$'s in 3 meters.
- 3) I think out of 9 meters you can make 27 bows. I think this because there are 27 $\frac{1}{3}$'s in 9 meters.
- 4) I think out of 27 meters you can make 81 bows. I think this because there are 81 $\frac{1}{3}$'s in 27 meters.
- 5) I think out of 81 meters you can make 243 bows. I think this because there are 243 $\frac{1}{3}$'s in 81 meters.

Dave [redacted]
Mathematics

Dec 14, 1993

Eric, Brian C., Caitlyn, Erin and I worked on the 9 meters problem. Each bow was 3 meters so $9-3=6$, 1 bow, $6-3=3$, 2 bows, and $3-3=0$, 3 bows. We also could have just said $3 \times 3 = 9$ but that's how you can prove it. ^{This can prove it!}



Erik [REDACTED]
Math

12/14/93
4-Phillip >

In math I measured the 9 meter ribbon and if each bow is 3 meters long you can make 3 bows. If each bow is $\frac{1}{3}$ of a meter you can make 27 bows. If you have 9 meter ribbon and divide it into 3 parts each part would be 3 meters. If you divided 9 meter ribbon into 27 parts each part would be $\frac{1}{3}$ of 1 meter.

Kimberly [redacted]
math shows

Dec. 14/1983
4-Phillips

~~The~~ The problem
I worked ~~on~~ on was
 $27 \times 3 = 81$. Here is the way I
do the the problem.

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

~~I take~~ I ~~do~~ do
 $\begin{array}{r} 27 \\ \times 3 \\ \hline \end{array}$

I write $\begin{array}{r} 27 \\ \times 3 \\ \hline \end{array}$
the one ~~down~~ down the one $\times 3$
and carry the two. $\begin{array}{r} 27 \\ \times 3 \\ \hline \end{array}$
I do $\begin{array}{r} 3 \\ + 2 \\ \hline 6 \end{array}$ and add the two

that I carried and ~~to~~ add
it ~~to~~ two the six and get
eight. That ~~is~~ is how I get
my answer.

In the problem the 27
is really $2 \frac{2}{3}$ meters and the
3 is really $\frac{1}{3}$. They are

used like a regular 27
and 3. ~~Q~~ That is the
best I can explain it.
I am still a little confused
with my own problem.

Maya

Beth [redacted]
math bows

December 14, 1993
4-Phillips

I made 3 bows out of 1 meter. I think that works because a 3rd means one out of 3 pieces. Out of three meters you can make 9 bows, since multiplying 3×3 equals 9. I can make 27 bows out of 9 meters, since multiplying 3×9 equals 27. Out of 27 meters I can make 81 bows, since multiplying 3×27 equals 81. I can make 243 bows out of 81 meters since multiplying 3×81 equals 243.

Why can you carry?

I think you can carry numbers, but if the number is going into the 10's column it has to have a ten value. Same with the 100's, 1,000's etc. etc.

Jessica [redacted]
Math bows

Dec 14, 1993
4-Phillips

What I did and why.

Today in Math we had ribbon and we had to figure out how many bows we can make out of it. Say you have 1 meter you can make 3 bows. If you have 3 meters you can make 9 bows. If you have 9 meters you can make 27 bows. If you have 27 meters you can make 81 bows. out of 81 meters you can make 243 bows. We did this by keep adding threes or multiplying.

EXAMPLE

	9	+227	+81	+243
	$\times 3$	$\times 3$	$\times 3$	$\times 3$
	27	81	243	729



$$\begin{array}{r} \text{+2} \\ 729 \\ \times \quad 3 \\ \hline 2187 \end{array}$$

$$\begin{array}{r} \text{+2 +2} \\ 2,187 \\ \times \quad 3 \\ \hline 6,561 \end{array}$$

$$\begin{array}{r} \text{+1} \\ 6561 \\ \times \quad 3 \\ \hline 19683 \end{array}$$

$$\begin{array}{r} \text{+2 +2} \\ 19683 \\ \times \quad 3 \\ \hline 59049 \end{array}$$

$$\begin{array}{r} \text{+2} \\ 59049 \\ \times \quad 3 \\ \hline 177147 \end{array}$$

$$\begin{array}{r} \text{+2 +2 +2} \\ 177147 \\ \times \quad 3 \\ \hline 531441 \end{array}$$

$$\begin{array}{r} \text{+1 +1} \\ 531,441 \\ \times \quad 3 \\ \hline 1,594,323 \end{array}$$

$$\begin{array}{r} \text{+1 +2 +1} \\ 1,594,323 \\ \times \quad 3 \\ \hline 4,782,969 \end{array}$$

$$\begin{array}{r} \text{+2 +2 +2 +2} \\ 4782969 \\ \times \quad 3 \\ \hline 14348907 \end{array}$$

$$\begin{array}{r} \text{+1 +1 +2 +2 +2} \\ 14348907 \\ \times \quad 3 \\ \hline 43046721 \end{array}$$

Audra [REDACTED]

Dec. 14, 1993
4 Ph.

Math Bows

Jakki [REDACTED] and I started the problems by multiplying. For example, 3 meters of ribbon and we have to divide them by 3 rds, would be 9. Because, there are 3 meters and there are 3 rds $3 \times 3 = 9$. When the numbers got too big for the calculator we had to add because the numbers were too big for us to multiply. Our last number was 285449991!

Sarah [REDACTED]
Math Bow's

Dec 14, 1993
4-Phillips

Today in math I x's by 3's
and I got up to the hundred
billions. I did it because the
math teacher told me I needed
to know how many bows you
can make out of 13's.

Brian
Math

Dec 14, 1993
4 Phillips

First we cut the string at 9m
and stretched it out to see how long
it was and we figured out the problem.
Why we thought string might
be easy and it helped.

Caitlin
Math

December 17, 1997
4 Phillipse

I went out in the hall
and worked on a problem.

How many bows can you
make with 9. meter?

Graham [redacted]
Math Bows

Dec. 14 1983
4-Phillips

For the first, second
and third ~~questions~~
questions Mark ~~and~~ Greg and
I measured string. ~~and~~ We
did, this because for each
meter we put a little mark
with a pen. We thought
for each meter, we could
divide a meter into
thirds to get an answer.

Gregory [redacted]
Math class

Dec. 14 1993
Phillips

~~I did~~

I went out in the hall because
it is more fun and I only did
it on the 9m one & the 27m one
because the other ones were too big.
When we got to the big one I
used a calculator, I soon had to stop
because we had to talk about it.
I thought it was fun and it was
easy enough that I could do it
with no problem. I had lots of fun.

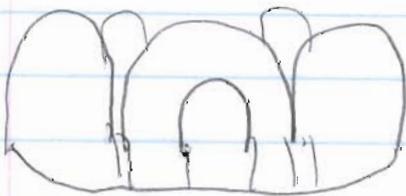
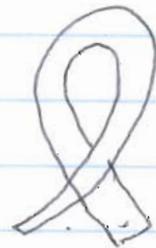
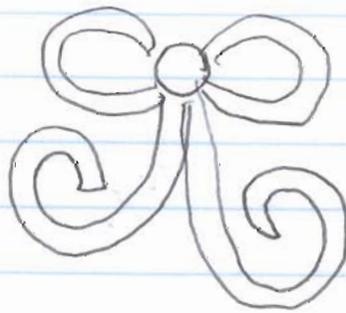
Jacqueline
Math



12/14/93
4-Pal

Math Bows

I kept dividing by ~~3~~ threes.
I did this because the first
problem's ~~was~~ answer was $3 \times 3 = 9$.
Then we took the 9
and did $9 \times 3 = 27$. We thought
this because there was 3 meters
~~x~~ 3 meters. (We got some help from others) We
also thought that it would go
by a pattern.



Mark [redacted]
Math bows

Dec. 14, 1993

1.) I got 27 bows out of 9 meters of ribbon. I will prove it.

$$\begin{array}{r} 3 \\ \hline 3 \\ \hline 6 \\ \hline 9 \\ \hline 12 \\ \hline 15 \\ \hline 18 \\ \hline 21 \\ \hline 24 \\ \hline 27 \end{array}$$

answer
27 bows

2.) I got 81 bows out of 27 meters of ribbon. I will show you my proof.

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

Danielle
Math ~~book~~ What you did + why

December 14, 1998
4-PH

I xed it. Because if
you think about it when you x everything
by 3 it will work

like

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 3x \\ 3 \\ \hline \end{array}$$

1) My group did the operation of multipuls:

$$\begin{array}{r} 9 \\ \times 3 \\ \hline 27 \\ \times 3 \\ \hline 81 \\ \times 3 \\ \hline 243 \\ \times 3 \\ \hline 729 \\ \times 3 \\ \hline \end{array}$$

James [redacted]
Mathews

Dec. 14, 1993
Phillips

~~Xm~~
I'm math today Andrew Panico and I worked together. We used multiplication for our problems. First we did three meters times three meters. The answer is nine. So we took nine meters and multiplied by three meters. The answer is twenty-seven etc. etc. Here are our first ~~five~~ ^{three} problems.

$$3 \times 3 = 9$$

$$9 \times 3 = 27$$

$$27 \times 3 = 81$$

Andrew
Math

12/14/93

Today with Rutgers
~~me~~ me and James worked
on the question how many
bows can you make
out of three meters and
more if the bows were
 $\frac{1}{3}$ of 1 meter. Me and
James got up to around
the 10 billion ~~the~~ meter.

Me and James did
this by multiplying
because we wouldn't
be ~~at~~ able to measure,
about 10 billion meters in
the hall.