ON THE BUTTON

HERE IS A BUTTON YOU CAN CUT OUT AND WEAR. TO DECODE THE BUTTON:

Solve any equation below and find your answer around the rim of the button.

Each time the answer appears on the button, write the letter in that equation above it.

KEEP SOLVING EQUATIONS AND YOU WILL DECODE THE BUTTON.

| 2/3 = E | 5/12 = R |
| -3/4 = S | -70/8 |
| -4/5 = D | 5/12 = L |
| 3/3 = C | 1/10 = A |
| -8/9 = H | -7/25 = 100 |
| G = -16/12 | N = 1/24 |
| 7/6 = V | 7/18 = 1/28 |
| -1/3 = I | -35/10 = 1 |
| 2/3 = W | -15/14 |
| -5/6 = O | 4/7 |
| -1/3 = T | 3/12 = 24 |
| -8/9 = C | 1/16 |

PRE-ALGEBRA WITH PIZZAZZ! © Creative Publications
Riddle Code?

The chicken had a home where she lived with delight. So why did she visit a construction site?

Directions:

The answer to this riddle is written in code at the bottom of the page. To break the code, solve any equation below and find your answer in the code. Each time the answer appears in the code, write the letter in that equation above it.

Keep working and you will discover the answer to the riddle. Write away!

<table>
<thead>
<tr>
<th>Equation</th>
<th>Answer</th>
<th>Equation</th>
<th>Answer</th>
<th>Equation</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>$G = \frac{3}{2} + \frac{-4}{2}$</td>
<td>$G = \frac{-1}{2}$</td>
<td>$N + \frac{7}{10} = \frac{-1}{10}$</td>
<td>$N = \frac{-7}{10}$</td>
<td>$S + \frac{8}{7} = 1$</td>
<td>$S = \frac{5}{7}$</td>
</tr>
<tr>
<td>$\frac{-5}{8} + \frac{7}{8} = K$</td>
<td>$K = \frac{1}{4}$</td>
<td>$M + \frac{-7}{18} = \frac{-5}{18}$</td>
<td>$M = \frac{-7}{18}$</td>
<td>$\frac{7}{12} + R = \frac{-5}{12}$</td>
<td>$R = \frac{-2}{3}$</td>
</tr>
<tr>
<td>$T = \frac{-11}{12} + \frac{-7}{12}$</td>
<td>$T = \frac{-1}{2}$</td>
<td>$C = \frac{-13}{15} + \frac{-12}{15}$</td>
<td>$C = \frac{-25}{15}$</td>
<td>$I + \frac{-11}{24} = \frac{5}{24}$</td>
<td>$I = \frac{17}{24}$</td>
</tr>
<tr>
<td>$\frac{-11}{9} + \frac{5}{9} = D$</td>
<td>$D = \frac{-2}{3}$</td>
<td>$\frac{-2}{3} + E = \frac{1}{3}$</td>
<td>$E = \frac{5}{3}$</td>
<td>$L = \frac{17}{48} + \frac{-14}{48}$</td>
<td>$L = \frac{3}{48}$</td>
</tr>
<tr>
<td>$\frac{3}{5} + Y = \frac{2}{5}$</td>
<td>$Y = \frac{1}{5}$</td>
<td>$\frac{5}{6} + W = 0$</td>
<td>$W = \frac{-5}{6}$</td>
<td>$\frac{-13}{10} + A = 0$</td>
<td>$A = \frac{13}{10}$</td>
</tr>
<tr>
<td>$\frac{-2}{3} + H = \frac{2}{3}$</td>
<td>$H = \frac{-4}{3}$</td>
<td>$\frac{-5}{16} + \frac{7}{16} = O$</td>
<td>$O = \frac{1}{16}$</td>
<td>$\frac{-6}{45} + \frac{-9}{45} = B$</td>
<td>$B = \frac{-15}{45}$</td>
</tr>
</tbody>
</table>

Solution:

\[
\begin{align*}
-1 & \quad 4 & \quad 1 & \quad -5 & \quad 13 & \quad -4 & \quad -3 & \quad 1 & \quad -2 & \quad -3 & \quad -4 & \quad -1 & \quad 1 & \quad 1 & \quad 13 \\
7 & \quad 3 & \quad 10 & \quad 5 & \quad 2 & \quad 3 & \quad 4 & \quad 7 & \quad 1 & \quad 4 & \quad 7 \\
1 & \quad 13 & \quad -4 & \quad 1 & \quad 13 & \quad -1 & \quad 2 & \quad -4 & \quad -1 & \quad 2 & \quad -1 & \quad 2 & \quad -5 & \quad 1 & \quad -1 \\
9 & \quad 10 & \quad 5 & \quad 16 & \quad 10 & \quad 5 & \quad 3 & \quad 5 & \quad 2 & \quad 3 & \quad 3 & \quad 4 & \quad 3 & \quad 4 & \quad 7
\end{align*}
\]
XX DOUBLE CROSS XX

1. What do you get when you cross A HUNTING DOG WITH A TELEPHONE?

\[
\begin{array}{cccccccccccc}
-7 & -1 & \frac{1}{3} & -1 & \frac{5}{24} & 67 & 5 & \frac{1}{12} & -1 & \frac{13}{24} & 1 & \frac{1}{12} & -17 & \frac{1}{30} & -17 & \frac{1}{30} & -3 & \frac{1}{3} & -17 & \frac{1}{12}
\end{array}
\]

2. What do you get when you cross A MOTORCYCLE WITH A JOKE BOOK?

\[
\begin{array}{cccccccccccc}
-7 & 29 & -7 & -1 & -7 & 17 & -7 & 17 & -7 & 17 & -7 & 17 & -7 & 17 & -7 & 18 & 24 & -7 & 18 & 24 & 18 & 24 & 18 & 24 & 18
\end{array}
\]

3. What do you get when you cross FIVE PIGS AND FIVE DEER?

\[
\begin{array}{cccccccccccc}
1 & -17 & -1 & \frac{13}{24} & 9 & -1 & \frac{5}{24} & -1 & \frac{1}{15} & 9 & -1 & \frac{13}{24} & 5 & -39 & -13 & \frac{1}{18} & 19 & \frac{1}{36} & 9 & \frac{1}{20}
\end{array}
\]

TO DECODE THE ANSWERS TO THESE THREE QUESTIONS:

Do any exercise below and find your answer in the code. Each time the answer appears in the code, write the letter of that exercise above it.

KEEP WORKING AND YOU WILL DISCOVER WHAT YOU GET FROM EACH DOUBLE CROSS!

\[
\begin{array}{cccc}
D & \frac{2}{3} + \frac{-1}{4} = & W & \frac{-9}{10} + \frac{-1}{6} = & G & \frac{-3}{4} + \frac{-7}{12} = \\
I & \frac{-4}{5} + \frac{1}{2} = & K & \frac{-1}{4} + \frac{7}{9} = & B & \frac{-3}{5} + \frac{-3}{8} = \\
O & \frac{-1}{3} + \frac{-7}{8} = & V & \frac{11}{15} + \frac{-2}{5} = & L & \frac{3}{10} + \frac{37}{100} = \\
M & \frac{-4}{5} + \frac{3}{4} = & N & \frac{-11}{12} + \frac{-5}{8} = & E & \frac{3}{10} + \frac{-13}{15} = \\
U & \frac{-1}{5} + \frac{-2}{3} = & Y & \frac{2}{3} + \frac{-1}{16} = & H & \frac{-1}{8} + \frac{5}{6} = \\
T & \frac{5}{6} + \frac{-7}{12} = & C & \frac{-4}{9} + \frac{1}{2} = & A & \frac{-1}{6} + \frac{-2}{9} = \\
R & \frac{-3}{4} + \frac{5}{6} = & & & S & \frac{-1}{4} + \frac{7}{10} = \\
\end{array}
\]
**SUM CODE**

Do any exercise below and find your answer in the answer columns. Notice the number in front of the answer. Each time this number appears in the code, write the letter of the exercise above it. Keep working and you will decode the message.

<table>
<thead>
<tr>
<th>S</th>
<th>-1 1/4 + -2 1/2 =</th>
<th>N</th>
<th>4 2/9 + -9 1/2 =</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>-3 2/3 + -1 2/5 =</td>
<td>W</td>
<td>-8 3/4 + 1 2/5 =</td>
</tr>
<tr>
<td>A</td>
<td>4 1/2 + -2 1/3 =</td>
<td>C</td>
<td>-3 1/4 + -5 7/9 =</td>
</tr>
<tr>
<td>F</td>
<td>3 1/6 + -5 3/5 =</td>
<td>G</td>
<td>6 8/11 + 2 2/3 =</td>
</tr>
<tr>
<td>U</td>
<td>-8 3/4 + 1 3/10 =</td>
<td>I</td>
<td>5 5/6 + -5 8/9 =</td>
</tr>
<tr>
<td>T</td>
<td>-7 1/3 + 7 3/4 =</td>
<td>H</td>
<td>-3 4/5 + 2 3/10 =</td>
</tr>
<tr>
<td>M</td>
<td>-2 1/16 + -2 1/3 =</td>
<td>R</td>
<td>8 3/8 + -9 2/3 =</td>
</tr>
<tr>
<td>L</td>
<td>6 3/7 + -4 1/4 =</td>
<td>E</td>
<td>-4 1/5 + -1 7/8 =</td>
</tr>
<tr>
<td>D</td>
<td>-1 1/6 + 5 7/10 =</td>
<td>B</td>
<td>-7 3/8 + 7 3/8 =</td>
</tr>
</tbody>
</table>

<table>
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<th>ANSERS</th>
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</thead>
<tbody>
<tr>
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<tr>
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<tr>
<td>4</td>
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<td>7</td>
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<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
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17·7·4·17·1·15·3·14·11·7·4·16·17·1·4·16·13·4·5·9·2·14·10·5·6

13·10·14·13·17·10·1·7·4·18·17·3·14·4·17·8·11·4·1·17·9·9·1·32·16

15·3·18·13·18·2·9·12·17·10·1·18·17·5·17·8·17·1·4·7·4·17·1·7·4·17·1?
**What do Hairdressers do?**

Do the exercises below. Circle the answers and their letters. Then rearrange the circled letters in each grid to make a word. Write the words in order in the boxes at the bottom of the page.

 WHEN YOU FINISH YOU WILL KNOW WHAT HAIRDRESSERS DO!

<p>| | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
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<td>$-2\frac{1}{4} - 4\frac{1}{3} =$</td>
<td>3</td>
<td>$-5\frac{1}{2} - \frac{11}{6} =$</td>
<td></td>
<td></td>
<td>E</td>
<td>$-4\frac{1}{3}$</td>
<td>R</td>
<td>$-6\frac{1}{3}$</td>
<td>Y</td>
<td>$2\frac{3}{8}$</td>
</tr>
<tr>
<td>2</td>
<td>$6\frac{3}{4} - 2\frac{4}{5} =$</td>
<td>4</td>
<td>$4\frac{1}{8} - 1\frac{3}{4} =$</td>
<td>A</td>
<td>$1\frac{1}{12}$</td>
<td>P</td>
<td>$-4\frac{1}{2}$</td>
<td>T</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>$-7\frac{1}{4} - 1\frac{7}{9} =$</td>
<td>S</td>
<td>$-5\frac{2}{3}$</td>
<td>H</td>
<td>$-6\frac{7}{12}$</td>
<td>I</td>
<td>$8\frac{1}{10}$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>$3\frac{2}{5} - 5\frac{5}{6} =$</td>
<td>8</td>
<td>$-4\frac{1}{2} - 2\frac{3}{5} =$</td>
<td>L</td>
<td>$9\frac{7}{30}$</td>
<td>T</td>
<td>$-1\frac{1}{2}$</td>
<td>U</td>
<td>$1\frac{8}{15}$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>$\frac{1}{6} - 6\frac{7}{8} =$</td>
<td>10</td>
<td>$-5\frac{1}{6} - \frac{2}{3} =$</td>
<td>R</td>
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<td>E</td>
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<tr>
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<td>$-3\frac{1}{7} - 1\frac{2}{5} =$</td>
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<td>$4\frac{2}{3} - \frac{5}{8} =$</td>
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<td>L</td>
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<td>$8\frac{1}{6} - 7\frac{3}{4} =$</td>
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<td>A</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
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<td>B</td>
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</tr>
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<td></td>
<td></td>
<td></td>
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<td>O</td>
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<td>D</td>
<td>$5\frac{7}{24}$</td>
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<td></td>
<td></td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>I</td>
<td>$-1\frac{1}{20}$</td>
<td>E</td>
<td>$\frac{5}{18}$</td>
<td>D</td>
<td>$7\frac{31}{40}$</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Y</td>
<td>$\frac{5}{12}$</td>
<td>T</td>
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<td>B</td>
<td>$7\frac{1}{2}$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FRACTION ATTRACTION

Do the exercises below. Find your answers in the rectangle at the bottom of the page. Cross out each box containing a correct answer. When you finish, there will be 9 boxes not crossed out. Print the letters in these boxes in the bottom row of boxes.

A HIDDEN MESSAGE WILL APPEAR!

1  \( \frac{2}{3} + \frac{-1}{2} = \)
2  \( \frac{-5}{6} - \frac{-2}{5} = \)
3  \( \frac{-2}{3} + \frac{-3}{10} = \)
4  \( \frac{9}{9} - \frac{5}{6} = \)
5  \( \frac{5}{4} + \frac{11}{15} = \)
6  \( \frac{-7}{8} - \frac{4}{5} = \)
7  \( \frac{4}{4} - \frac{-2}{5} = \)
8  \( \frac{-7}{8} + \frac{4}{4} = \)
9  \( \frac{1}{5} - \frac{-3}{8} = \)
10 \( \frac{7}{12} - \frac{-7}{8} = \)
11 \( \frac{4}{5} + \frac{2}{3} = \)
12 \( \frac{-3}{3} + \frac{-3}{16} = \)
13 \( \frac{1}{2} - \frac{6}{9} = \)
14 \( \frac{-2}{4} - \frac{5}{9} = \)
15 \( \frac{-1}{4} + \frac{5}{6} = \)
16 \( \frac{-4}{2} - \frac{-6}{5} = \)
17 \( \frac{11}{15} - \frac{-5}{2} = \)
18 \( -6 + \frac{6}{8} = \)

<table>
<thead>
<tr>
<th>CAR</th>
<th>PET</th>
<th>RAC</th>
<th>KET</th>
<th>ERS</th>
<th>KID</th>
<th>OGS</th>
<th>TOP</th>
<th>SWI</th>
</tr>
</thead>
<tbody>
<tr>
<td>-9(\frac{11}{36})</td>
<td>6(\frac{13}{20})</td>
<td>(\frac{1}{8})</td>
<td>-4(\frac{19}{30})</td>
<td>-4(\frac{23}{30})</td>
<td>3(\frac{11}{12})</td>
<td>5(\frac{7}{24})</td>
<td>7(\frac{29}{60})</td>
<td>-9(\frac{17}{36})</td>
</tr>
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<td>NGT</td>
<td>ALL</td>
<td>UMP</td>
<td>IRE</td>
<td>STA</td>
<td>SHA</td>
<td>LLO</td>
<td>VEA</td>
</tr>
<tr>
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<td>8(\frac{5}{18})</td>
<td>-6(\frac{31}{48})</td>
<td>-6(\frac{37}{48})</td>
<td>-5(\frac{27}{40})</td>
<td>1(\frac{1}{6})</td>
<td>7(\frac{37}{60})</td>
<td>5(\frac{17}{24})</td>
<td>6(\frac{9}{20})</td>
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<tr>
<td>CUT</td>
<td>SWE</td>
<td>ETI</td>
<td>SFA</td>
<td>LLT</td>
<td>OST</td>
<td>ALL</td>
<td>IME</td>
<td>ING</td>
</tr>
<tr>
<td>-11(\frac{1}{24})</td>
<td>8(\frac{1}{18})</td>
<td>-5(\frac{5}{18})</td>
<td>-3(\frac{7}{30})</td>
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<td>-2(\frac{3}{8})</td>
<td>2(\frac{3}{10})</td>
<td>1(\frac{9}{10})</td>
</tr>
</tbody>
</table>

PRE-ALGEBRA WITH PIZZAZZ!
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Do the problems below and on page 2. Find your answers in the maze on page 2. SHADE IN each room containing a correct answer.

Then find a path to the Treasure that goes only through rooms you have NOT shaded in. The words in those rooms will form an a-mazing message!

The temperature at 6:00 P.M. in Frostfrozen, Antarctica was $-37 \, ^\circ C$.

If the temperature dropped $8 \frac{1}{2} \, ^\circ C$ during the next hour, what was the temperature at 7:00 P.M.?

Cash Orcheck had a balance of $867 in his checking account on January 1. During January, Cash wrote checks for the following amounts: $98, $456, $29, and $381. What was his balance at the end of January?

Joe Terrific gained 986 yards during football season. Ziggy Fumble lost 118 yards during the season. What was the difference in their yardage gains?

The net profit for 4 months of Calculess Company is shown in the table. What was the net profit for the 4 month period?

<table>
<thead>
<tr>
<th>Month</th>
<th>Net Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>$34,500</td>
</tr>
<tr>
<td>Feb.</td>
<td>$15,600</td>
</tr>
<tr>
<td>Mar.</td>
<td>$5,800</td>
</tr>
<tr>
<td>Apr.</td>
<td>$-20,000</td>
</tr>
</tbody>
</table>

A submarine was cruising at $-132$ meters. It then climbed to $-64 \frac{1}{2}$ meters. What was the difference between its original altitude and its later altitude?

An elevator traveled in this way: up 18 floors, down 6 floors, down 14 floors, up 19 floors, down 25 floors. What was the net change in position of the elevator?

Astronauts Milky and Way boarded their spacecraft $4 \frac{1}{2}$ hours before launch. They ate lunch $2 \frac{1}{3}$ hours after launch. How many hours passed between boarding time and lunch time?

The Buzzards football team made the following gains on four plays: 9 yards, $-11$ yards, $-2 \frac{2}{3}$ yards, $6 \frac{1}{3}$ yards. What was the net change in position of the Buzzards as a result of the four plays?

On Monday, the temperature in Iceberg, North Pole was $-19 \, ^\circ C$.

On Tuesday, it rose $26 \frac{1}{2} \, ^\circ C$. On Wednesday, it dropped $33 \frac{1}{2} \, ^\circ C$.

What was the temperature on Wednesday?

During a week, the stock of M.A.T.H. Corporation had the following daily changes in price: Monday, up 4 points; Tuesday, down 6 points; Wednesday, up $3 \frac{1}{2}$ points; Thursday, up $1 \frac{1}{4}$ points; Friday, down $\frac{5}{8}$ of a point. What was the net change in price of the stock for the week?
What is the distance $x$ in the figure at the right?

A cross-country skier started skiing at the 2000 meter level of a mountain. His altitude changed during the next four hours as follows: 1st hour, up 47 meters; 2nd hour, down 269 meters; 3rd hour, down 109 meters; 4th hour, up 54 meters. What was his altitude after the 4th hour?

One of two brothers was scuba diving at $-9\frac{1}{2}$ meters. The other brother was flying in a helicopter at 298 meters. What was the difference in the two brothers' altitudes?
# What Happened to the Guy Who Wanted to be a Human Cannonball at the Circus?

Do each exercise mentally. Write the letter of the exercise in the box containing the number of the correct choice.

| N | 1 \( \frac{1}{5} + \frac{2}{5} \) | I | 1 - \( \frac{1}{10} \) | E | 1 - \( \frac{1}{100} \) | D | 2 - \( \frac{1}{3} \) | A | 8 - \( \frac{1}{8} \) |
|---|---|---|---|---|---|---|---|---|
| 4 | \( -\frac{1}{5} \) | 13 \( \frac{1}{10} \) | 7 | \( \frac{9}{10} \) | 17 \( \frac{99}{100} \) | 16 | \( \frac{1}{100} \) | 23 \( \frac{1}{3} \) | 10 | \( \frac{1}{2} \) |
| E | \( \frac{1}{5} - \frac{2}{5} \) | H | -1 + \( \frac{1}{10} \) | A | \( 2\frac{1}{2} - \frac{1}{4} \) | O | \( -\frac{1}{7} - \frac{15}{7} \) | E | \( -2\frac{1}{2} - \frac{5}{2} \) |
| 2 | \( -\frac{1}{5} \) | 20 | \( \frac{3}{5} \) | 15 | \( -\frac{9}{10} \) | 22 | \( -1 \frac{1}{10} \) | 29 | \( \frac{1}{4} \) | 4 | \( \frac{1}{2} \) |
| D | \( \frac{1}{2} + \frac{1}{4} \) | A | \( \frac{3}{4} + \frac{1}{2} \) | T | -1 + \( \frac{1}{4} \) | S | \( \frac{1}{2} + \frac{3}{4} \) | D | \( \frac{1}{2} - \frac{1}{3} \) |
| 13 | \( \frac{3}{4} \) | 30 | \( \frac{1}{4} \) | 8 | \( \frac{2}{3} \) | 29 | \( \frac{1}{4} \) | 21 | \( -\frac{3}{4} \) | 3 | \( -\frac{1}{4} \) |
| E | \( -1 + \frac{1}{2} \) | I | 2 - \( \frac{1}{4} \) | H | \( -4 + \frac{3}{5} \) | A | \( \frac{1}{2} + \frac{1}{10} \) | N | \( -\frac{13}{9} + \frac{5}{9} \) |
| 6 | \( -\frac{1}{2} \) | 23 | \( -\frac{1}{2} \) | 9 | \( \frac{1}{2} \) | 15 | \( \frac{3}{4} \) | 24 | \( -\frac{3}{5} \) | 1 | \( -\frac{3}{5} \) |
| Y | \( 2\frac{1}{2} + 2\frac{1}{2} \) | E | \( 1 - \frac{9}{10} \) | S | \( 6 - \frac{1}{2} \) | W | \( 1 - \frac{99}{100} \) | R | \( \frac{1}{2} + \frac{1}{10} \) |
| 30 | 5 | 24 | \( 4\frac{1}{2} \) | 9 | \( \frac{1}{10} \) | 8 | \( -\frac{1}{10} \) | 24 | \( 6\frac{1}{2} \) | 6 | \( 5\frac{1}{2} \) |
| D | \( 3 + \frac{1}{8} \) | H | \( \frac{1}{10} - 1 \) | M | \( \frac{7}{25} + \frac{18}{25} \) | R | \( \frac{99}{100} - 1 \) | F | \( 1 - \frac{1}{2} \) |
| 28 | \( \frac{3}{8} \) | 14 | \( 2\frac{7}{8} \) | 26 | \( -\frac{1}{10} \) | 6 | \( -\frac{9}{10} \) | 14 | \( \frac{1}{2} \) | 26 | 1 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
What did the DENTIST say to the GOLFER?

Some of the exercises on this page have the same answer. In fact, there are only 6 different answers for all 17 exercises. These 6 answers are printed at the bottom of the page.

To answer the title question:

Do any exercise and find the answer at the bottom of the page. Write the letter of that exercise in ANY ONE of the boxes directly under its answer.

When you finish all the exercises, rearrange the letters in each group to make a word. Write the words in the BOTTOM row of boxes.

\[
\begin{align*}
N & \quad -\frac{4}{15} \cdot 9 = \\
O & \quad \frac{5}{9} \cdot -6 = \\
E & \quad \frac{7}{6} \cdot \frac{9}{14} = \\
O & \quad -3 \cdot \frac{2}{9} = \\
E & \quad \frac{10}{7} \cdot \frac{-7}{3} = \\
A & \quad \frac{8}{21} \cdot \frac{7}{20} = \\
E & \quad -\frac{7}{12} \cdot -10 = \\
N & \quad -\frac{25}{9} \cdot -\frac{21}{10} = \\
A & \quad -5 \cdot -\frac{3}{20} = \\
I & \quad -6 \cdot \frac{2}{5} = \\
V & \quad \frac{11}{2} \cdot \frac{3}{22} = \\
L & \quad \frac{11}{6} \cdot -\frac{20}{11} = \\
U & \quad -\frac{8}{9} \cdot \frac{3}{4} = \\
H & \quad -\frac{15}{14} \cdot -\frac{7}{10} = \\
O & \quad \frac{7}{2} \cdot \frac{5}{3} = \\
Y & \quad \frac{5}{12} \cdot -\frac{8}{5} = \\
H & \quad -\frac{18}{5} \cdot \frac{25}{27} = \\
\end{align*}
\]
ABOVE ARE THE TITLES OF THREE “BOOKS NEVER WRITTEN.”
TO DECODE THE NAMES OF THEIR AUTHORS, FOLLOW
THese DIRECTIONS:

Use the DISTRIBUTIVE PROPERTY to do any exercise below.
Find each circled answer in the code. Each time the answer
appears, write the letter of that exercise above it. Keep working
and you will decode the names of all three authors. Write on!

G  $2\frac{1}{2} \times 6 = 12 + 3 = \_ \_ \_ \_ \_ \_
A  $8 \times 5\frac{1}{2} = 40 + \_ = \_ \_ \_ \_ \_
F  $3\frac{1}{2} \times 14 = \_ + \_ = \_ \_ \_ \_ \_
O  $3 \times 4\frac{1}{3} = \_ + \_ = \_ \_ \_ \_ \_
E  $6\frac{1}{3} \times 12 = \_ + \_ = \_ \_ \_ \_ \_
Y  $10 \times 2\frac{1}{5} = \_ + \_ = \_ \_ \_ \_ \_
I  $3\frac{1}{4} \times 24 = \_ + \_ = \_ \_ \_ \_ \_
W  $9 \times 7\frac{2}{3} = \_ + \_ = \_ \_ \_ \_ \_
N  $1\frac{3}{4} \times 20 = \_ + \_ = \_ \_ \_ \_ \_
H  $8 \times 9\frac{5}{6} = \_ + \_ = \_ \_ \_ \_ \_
M  $4\frac{5}{6} \times 18 = \_ + \_ = \_ \_ \_ \_ \_
L  $15 \times 3\frac{3}{5} = \_ + \_ = \_ \_ \_ \_ \_

T  $17 \times 36 = \_ + \_ = \_ \_ \_ \_ \_
D  $16 \times 5\frac{7}{8} = \_ + \_ = \_ \_ \_ \_ \_
K  $2\frac{7}{12} \times 24 = \_ + \_ = \_ \_ \_ \_ \_
S  $40 \times 2\frac{3}{10} = \_ + \_ = \_ \_ \_ \_ \_
V  There are 10 millimeters in 1 centimeter. How
   many millimeters are
   there in $8\frac{2}{5}$ centimeters?
U  How many hours are
   there in $3\frac{2}{3}$ days?
C  Zorna baked $7\frac{3}{4}$ dozen
   cookies. How many
   cookies did she bake?
R  How many seconds are
   there in $1\frac{1}{2}$ minutes?
FAMOUS QUOTATIONS

1. WHAT DID GEORGE WASHINGTON SAY TO HIS MEN JUST BEFORE THEY GOT IN THE BOAT?
   Answer:
   
   $8\frac{2}{5}$ $2\frac{4}{7}$ $-1\frac{1}{16}$ $-8$ $2\frac{4}{7}$ $9\frac{4}{5}$ $8\frac{1}{5}$ $-1\frac{1}{16}$ $9\frac{4}{5}$ $-3\frac{1}{4}$ $2\frac{4}{7}$ $-1\frac{2}{3}$ $-25$ $18\frac{1}{5}$ $9\frac{4}{5}$

2. WHAT DID LEWIS AND CLARK SAY BEFORE THEY REACHED THE SEA?
   Answer:
   
   $-24$ $-25$ $-1\frac{1}{16}$ $-8$ $9\frac{4}{5}$ $8\frac{1}{5}$ $8\frac{2}{5}$ $2\frac{4}{7}$ $-1\frac{1}{16}$ $-25$ $-7\frac{1}{3}$ $2\frac{4}{7}$ $18\frac{1}{5}$

3. WHAT DID BENJAMIN FRANKLIN SAY ABOUT DOING MATH?
   Answer:
   
   $8\frac{1}{8}$ $7\frac{1}{3}$ $-2\frac{1}{10}$ $18\frac{1}{5}$ $9\frac{4}{5}$ $-3\frac{1}{4}$ $2\frac{4}{7}$ $-2\frac{1}{10}$ $-20$ $-24$ $2\frac{1}{4}$ $18\frac{1}{5}$ $15\frac{3}{4}$ $8\frac{1}{8}$ $9\frac{4}{5}$ $2\frac{4}{7}$

Do any exercise below and find your answer in the code. Each time the answer appears in the code, write the letter of that exercise above it. Keep working and you will discover the three historical (hysterical) answers.

\[
\begin{align*}
\text{H} & \quad \left( \frac{1}{4} \right) \left( -2\frac{3}{5} \right) = \\
\text{G} & \quad \left( -1\frac{5}{7} \right) \left( 4\frac{2}{3} \right) = \\
\text{D} & \quad \left( -6 \right) \left( -1\frac{2}{9} \right) = \\
\text{Y} & \quad \left( 1\frac{4}{11} \right) \left( 1\frac{13}{20} \right) = \\
\text{I} & \quad \left( -6\frac{1}{2} \right) \left( -1\frac{1}{4} \right) = \\
\text{F} & \quad \left( -2\frac{1}{2} \right) \left( 8 \right) = \\
\text{B} & \quad \left( \frac{3}{7} \right) \left( -\frac{7}{15} \right) = \\
\text{R} & \quad \left( \frac{7}{11} \right) \left( -3\frac{3}{10} \right) = \\
\text{K} & \quad \left( -\frac{2}{13} \right) \left( -7 \right) = \\
\text{S} & \quad \left( -2\frac{1}{2} \right) \left( 2\frac{2}{3} \right) \left( 1\frac{1}{10} \right) = \\
\text{M} & \quad \left( 4 \right) \left( -4\frac{4}{5} \right) \left( -1\frac{5}{6} \right) = \\
\text{A} & \quad \left( -\frac{3}{4} \right) \left( -2\frac{2}{5} \right) \left( 2\frac{1}{3} \right) = \\
\text{L} & \quad \left( -1\frac{5}{9} \right) \left( -3 \right) \left( -5\frac{1}{7} \right) = \\
\text{T} & \quad \left( 4\frac{1}{2} \right) \left( 5\frac{3}{5} \right) \left( \frac{7}{18} \right) = \\
\text{N} & \quad \left( 4\frac{1}{8} \right) \left( \frac{1}{6} \right) \left( -1\frac{6}{11} \right) = \\
\text{O} & \quad \left( -1\frac{2}{3} \right) \left( -3\frac{3}{4} \right) \left( -4 \right) = \\
\text{E} & \quad \left( -\frac{2}{13} \right) \left( 3\frac{5}{7} \right) \left( -4\frac{1}{2} \right) = \\
\end{align*}
\]
What is the Title of This Picture?

TO DECODE THE TITLE OF THIS PICTURE:

Find the reciprocals of the given numbers in the first 12 exercises on the left.

Then do the remaining 6 exercises by solving each equation for n.

After doing each exercise, find your answer in the code. Each time the answer appears, write the letter of that exercise above it. Keep working and you will discover the answer to the title question.

FIND THE RECIPROCAL

\[
\begin{align*}
L & \quad \frac{4}{5} \\
H & \quad \frac{-1}{2} \\
Y & \quad \frac{-3}{11} \\
M & \quad 12\frac{1}{2} \\
E & \quad 10 \\
\end{align*}
\]

SOLVE FOR \( n \)

\[
\begin{align*}
P & \quad 33\frac{1}{3} \\
G & \quad \frac{-1}{9} \\
K & \quad -3\frac{7}{12} \\
S & \quad 2\frac{3}{10} \\
C & \quad -1 \\
I & \quad -17\frac{3}{4} \\
V & \quad \frac{9}{10} \cdot n = 1 \\
U & \quad 4\frac{5}{8} \cdot n = 1 \\
A & \quad -6\frac{5}{7} \cdot n = 1 \\
R & \quad n \cdot 16\frac{2}{3} = 1 \\
W & \quad n \cdot -9\frac{2}{5} = 1 \\
T & \quad \frac{3}{7} \cdot n = 1 \\
\end{align*}
\]

CODED TITLE:

\[
\begin{align*}
&10 & 1 & 3 & -11 & 3 & 5 & 8 & 2 & 10 & -11 \\
&\frac{9}{3} & 10 & 50 & \frac{-11}{3} & 5 & 4 & 37 & 25 & 23 & \frac{-11}{3} \\
&\frac{7}{3} & -4 & -9 & -2 & 7 & 3 & -8 & 3 & 1 & \frac{1}{10} \\
&\frac{7}{71} & 7 & 3 & 50 & \frac{-8}{15} & 100 & \frac{-1}{10} \\
&\frac{5}{47} & -7 & 5 & \frac{-12}{43} & 1 & 3 & \frac{50}{10} \\
\end{align*}
\]
Why did Ray Friar need to get an approval from Councilman Hugh before he could open a flower shop?

**TO FIND THE ANSWER:**

Do any exercise below and find your answer in the code at the bottom of the page. Each time the answer appears in the code, write the letter of that exercise above it. Keep working and you will discover the moral of the story.

| S | $\frac{-3}{7} \div \frac{1}{2} = $ | T | $\frac{25}{3} \div \frac{15}{6} = $ | N | $\frac{-7}{10} \div 7 = $ |
|---|---|---|---|---|
| C | $\frac{-4}{5} \div \frac{-4}{3} = $ | G | $\frac{-7}{9} \div \frac{-21}{6} = $ | L | $\frac{11}{12} \div \frac{-33}{8} = $ |
| Y | $\frac{5}{8} \div \frac{-7}{12} = $ | I | $\frac{-11}{4} \div \frac{2}{3} = $ | P | $\frac{-45}{4} \div \frac{-15}{16} = $ |
| A | $\frac{-15}{13} \div \frac{-10}{11} = $ | V | $\frac{-9}{10} \div \frac{-12}{5} = $ | H | $\frac{6}{20} \div \frac{7}{10} = $ |
| E | $\frac{5}{6} \div \frac{-7}{8} = $ | O | $3 \div \frac{-2}{3} = $ | R | $-10 \div \frac{-4}{7} = $ |
| D | $\frac{-8}{9} \div 2 = $ | U | $\frac{4}{15} \div \frac{-14}{5} = $ | F | $\frac{-48}{9} \div \frac{16}{21} = $ |

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Why did they build a GYM on WALL STREET?

TO ANSWER THIS QUESTION, FOLLOW THESE DIRECTIONS:

Do any exercise below and find your answer in the boxes at the bottom of the page. Write the letter of the exercise in the box above its correct answer. Keep working until you discover the answer to the title question.
What did the 800 lb MONSTER say to the 400 lb MONSTER??

TO DISCOVER THE WORDS OF THE 800 POUND MONSTER:

Do each exercise and find the answer at the bottom of the page. Shade in the letter above each correct answer. When you finish, the monster’s words will remain!

1. \( \frac{-2}{3} + \frac{-4}{5} = \)
2. \( \frac{1}{2} - \frac{7}{10} = \)
3. \( \left( \frac{-6}{7} \right) \left( \frac{3}{8} \right) = \)
4. \( \frac{-9}{10} \div \frac{-6}{15} = \)
5. \( 1\frac{1}{4} + -3\frac{5}{6} = \)
6. \( -7\frac{3}{10} - -4\frac{4}{5} = \)
7. \( \left( \frac{-1\frac{5}{9}}{2\frac{1}{7}} \right) = \)
8. \( 5\frac{2}{3} \div -1\frac{2}{15} = \)
9. \( -\frac{2}{3} + 6\frac{1}{8} = \)
10. \( -3\frac{2}{5} - \frac{5}{6} = \)
11. \( (6) \left( \frac{1\frac{3}{10}}{1} \right) = \)
12. \( -12 \div \frac{1}{3} = \)
13. \( 2\frac{3}{4} + 2\frac{5}{9} = \)
14. \( \frac{5}{8} - 5 = \)
15. \( \left( \frac{3\frac{5}{9}}{2\frac{1}{7}} \right) = \)
16. \( -3\frac{4}{7} \div -\frac{5}{8} = \)
17. \( 8\frac{7}{10} + -4\frac{1}{4} = \)
18. \( \left( \frac{-2}{3} \right) \left( \frac{1\frac{2}{5}}{\frac{-1\frac{5}{7}}{1}} \right) = \)
19. \( 4\frac{3}{11} \div 4\frac{7}{11} = \)

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Why did the TERMITE like expensive hotels?

Do each exercise below and find the answer in the rectangle at the bottom of the page. Cross out each box containing a correct answer. When you finish, there will be 8 boxes not crossed out. Print the letters in these boxes in the bottom row of boxes.

THE ANSWER TO THE TITLE QUESTION WILL APPEAR!

1. A recipe calls for \(3\frac{3}{4}\) cups of flour. How much flour is needed to make \(\frac{1}{2}\) the recipe? \[\text{cups}\]

2. A team member played \(5\frac{3}{4}\) minutes during the first period, \(2\frac{2}{3}\) minutes during the second period, and \(10\frac{1}{6}\) minutes during the third period. How many minutes did he or she play in all? \[\text{minutes}\]

3. A \(3\frac{1}{2}\) gallon gas can contains \(\frac{9}{10}\) gallon. How much more gas can be poured in? \[\text{gallons}\]

4. A kilometer is about \(\frac{5}{8}\) mile. How many kilometers are in \(2\frac{3}{4}\) miles? \[\text{km}\]

5. A rectangular plot of land is \(1\frac{1}{2}\) miles wide by \(2\frac{1}{3}\) miles long. What is its area? \[\text{sq. mi.}\]

6. Stock sold at \(23\frac{7}{8}\) at the start of trading. It was up \(3\frac{1}{2}\) points at the end of trading. What was the price at the end of trading? \[\text{dollars}\]

7. Cut \(2\frac{2}{3}\) yards of material from a piece \(5\frac{1}{2}\) yards long. How much material is left? \[\text{yards}\]

8. A bottle of TNT Tonic contains \(10\frac{1}{2}\) ounces and sells for \(98\) cents. What is the cost per ounce? \[\text{cents}\]

9. A team played 42 games and won \(\frac{5}{14}\) of them. How many games were lost? \[

10. UFO Industries makes \(\frac{1}{3}\) of the world's widgets. IOU Corporation makes \(\frac{2}{5}\) of the world's widgets. DDT Enterprises makes \(\frac{1}{6}\). What fraction is made by other companies? \[

11. A math textbook is \(1\frac{3}{8}\) inches thick. How many of these books will fit on a 33-inch shelf? \[

12. A rocket's speed is \(2\frac{1}{3}\) miles per second. How fast is this in miles per hour? \[\text{m.p.h.}\]

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**WHAT IS A FALSEHOOD?**

TO ANSWER THIS QUESTION, FOLLOW THESE DIRECTIONS:

Fractions appear on two sides of the rectangle below, and their decimal equivalents appear on the other two sides. Draw a STRAIGHT LINE connecting each fraction to its decimal equivalent.

When you finish, you will notice that some areas in the rectangle contain an "S," which stands for "shade." Shade in all of these areas. The answer to the title question will appear!