

MATH SUPERSTARS – 6

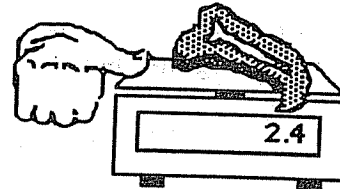
Uranus, XI

Name: _____

(This shows my own thinking.)

- ★★ 1. Harry the Hog is a disgrace to butchers everywhere! He's known for keeping his thumb on the scale for a little extra weight and therefore money. The T-bone sells for \$2.99 a pound, but Harry's thumb has added 0.3 lb. to the scale.

- a. What will you pay for the steak if you don't notice his thumb? _____
- b. What will you pay for the steak if you make him remove his thumb? _____

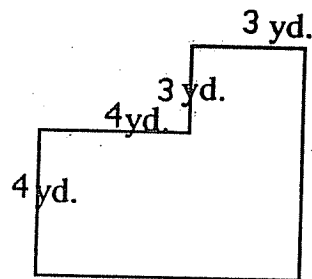


- ★★ 2. A notebook costs \$1 more than a pencil. Together they cost \$1.50. How much does each item cost?

Answer: a) The notebook costs _____.

b) The pencil costs _____.

- ★★ 3. One of the classrooms at the middle school is shaped like the picture to the right. What is the area of the entire room?



Answer: _____

- ★★ 4. Arrange the fractions $\frac{2}{3}$, $\frac{1}{2}$, $\frac{5}{6}$, $\frac{7}{12}$, and $\frac{3}{4}$ in order from smallest to largest.

Answer: _____

- ★★ 5. Johnny had a raise in pay that moved him from \$4.00 an hour to \$4.60 an hour. What was his percentage of increase in pay for one hour?

Answer: The percentage raise was _____% per hour.

- ★★★★ 6. In the array below, the middle entry in each *odd* row is the square of the row number itself. So in the third row, the middle entry is nine, and $3 \times 3 = 9$.

- a) What is the middle entry of the 23rd row going to be?

Answer: _____

			1			→ row 1
		3	5			→ row 2
	7	9	11			→ row 3
	13	15	17	19		→ row 4
21	23	25	27	29		→ row 5

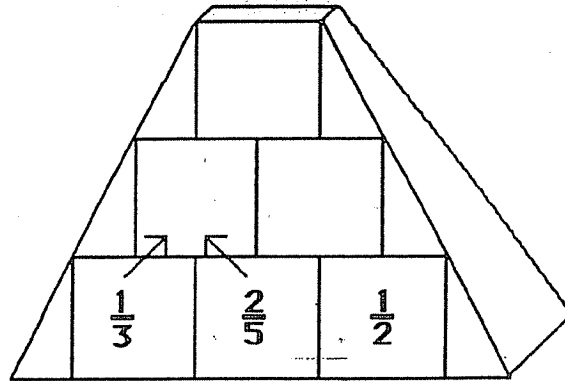
- b) What will be the sum of the numbers in the 10th row?

Answer: _____

- ★ 7. A digit in the fifth place to the left of the decimal point has what place value?

Answer: _____

- ★★★ 8. Complete the pyramid by adding adjacent fractions and placing the sum above the two numbers being added. Put your answers in lowest terms in the three squares.



- ★★ 9. To make four servings of cream of wheat, you bring to a boil 4 cups of water, and then mix in $\frac{2}{3}$ of a cup of cream of wheat. But a family of three doesn't want to make four servings.

a. How much water would be required for three servings of cream of wheat? _____

b. How much cream of wheat would be required for a serving of three? _____