Math 200 - Quiz 6

March 17, 2010

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (1 point) Use any one of the algorithms that we studied except for the standard addition algorithm to compute $5675 + 6678$.

SCRATCH:

$$\begin{array}{r} {\scriptstyle 1\,1\,1} \\ 5675 \\ +\ 6678 \\ \hline 12,353 \end{array}$$

12,353

2. (1 point) Use any one of the algorithms that we studied except for the standard subtraction algorithm to compute $345 - 269$.

$345 + 1 = 346 + 30 = 376$

$-\ 269 + 1 = -\ 270 + 30 = -\ 300$

76

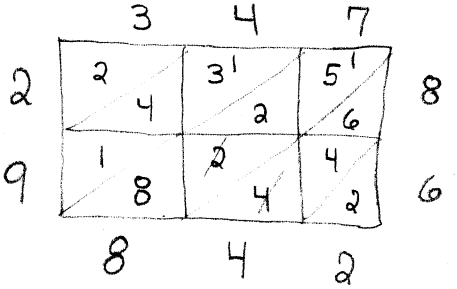
3. (1 point) Use any algorithm to compute $231_{\text{four}} + 333_{\text{four}} + 212_{\text{four}} + 133_{\text{four}}$. = 2301 FOUR

BASE FOUR

2301

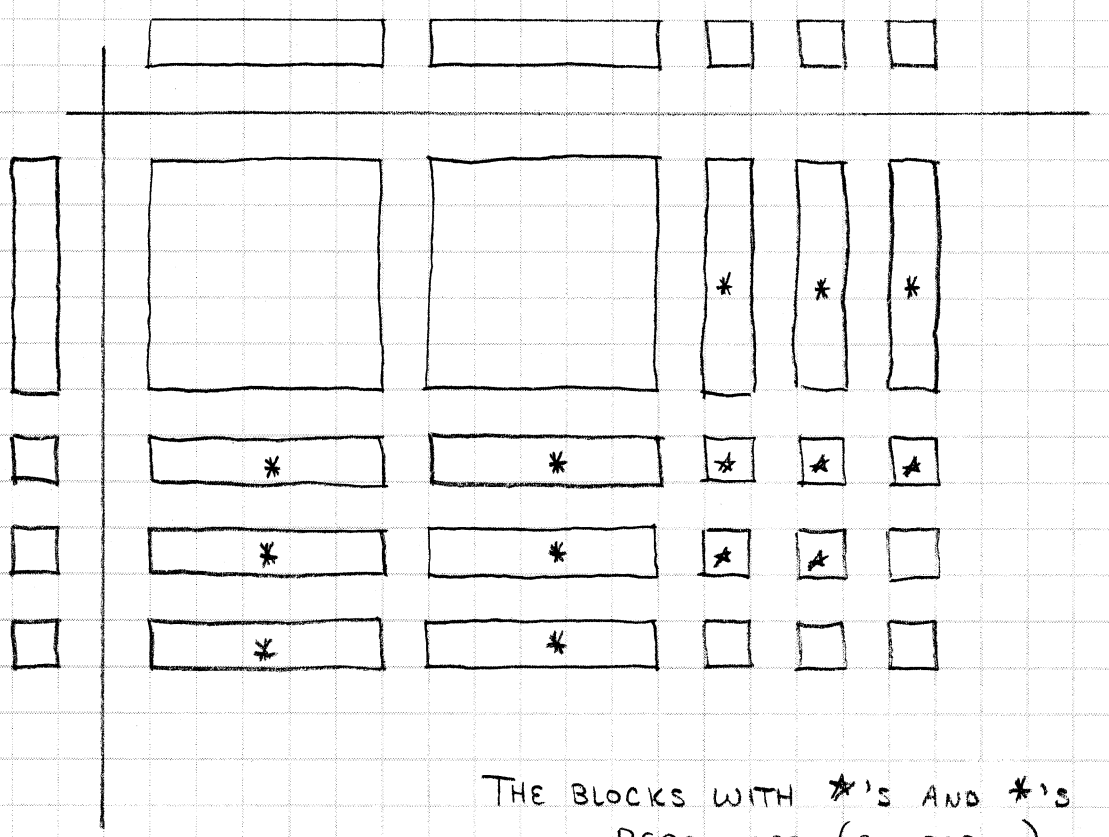
4. (1 point) Use any one of the algorithms that we studied except for the standard multiplication algorithm to compute 347×86.

29,842

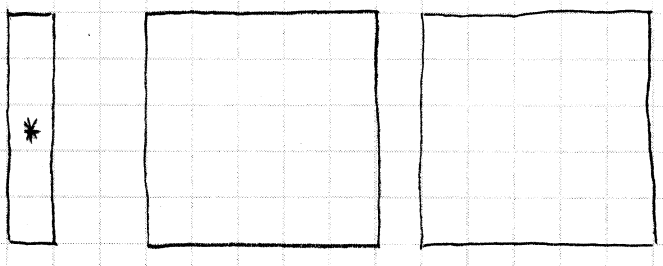


5. (1 point) On the back of this sheet, use base-five blocks to compute and illustrate $23_{\text{five}} \times 13_{\text{five}}$.

$23_{\text{FIVE}} \times 13_{\text{FIVE}}$



THE BLOCKS WITH ✱'S AND ✱'S REGROUPED (COMPOSED).



ALL SAID AND DONE, WE HAVE 4 FLATS AND 4 UNITS.

404_{FIVE}