## The July Revision of the Texas Math Standards R. James Milgram

Overall, I nd these standards very disappointing, and feel

- KG05 Delete everything after \squares."
- KG07 What is the point of specifying popsicle sticks, straws, etc?
- KG08 Too many concepts. What are important here are \above, below, in

expect would be dead silence.

- 1A03 If subtraction is defined correctly as is done in the high achieving countries, A B is that number A, if it exists, so that B + A = A, then this makes sense. But otherwise, it is far to vague.
- 1A03b **identify relationships** is too vague as stated. It is important to give some idea of what kind of relationship you are looking for.
- 1G03 Part two, \partition two dimensional" It is far from clear to rst graders what two and four fair shares mean. For example one can look at the answers they provide for breaking a circle into three fair shares. They usually do not see that the sections should have the same area. So be very careful here.
- 1M01 How can one demonstrate this? It is more like a DEFINITION of length, at least for certain gures.
- 1M03 \a unit such as 5 Popsicle sticks" is very awkward. One would not generally assume that such a unit is a unit of length. The popsicle sticks could be piled one on top of the other for example.
- 1M06 The total number of objects should be limited, maybe no more than 15.
- 1M07 I would judge this to be too complex for rst grade.

Second Grade

- 1N01 Part b \demonstrate conceptual subitizing" As before, the term \subitizing" should be replaced. Also, this is not something I would not think of as a mathematics standard of any importance.
- 2N02 Why 999? Why is 2N03 up to 9,999. I would prefer more focus on the expanded form.
- 2N06 As before, the division of things into equal parts is something that needs to be handled with real care.
- 2N08 If not carefully treated the students will simply learn vocabulatly at fractions for the students will subtrate the students will simply learn vocabulatly at the say so.

2G01 Specify that the

of numbers when they are written in base-ten place-value notation.

- 4N06 Of what earthly use is this standard?
- 4N12 What is the point of this standard? It just seems like makework to me. Moreover, the end-result would likely be more confusion for students.
- 4N13 One needs a DEFINITION of equivalent fractions before one can explain that → is \equivalent" to → . Without such a de nition a standard like this is circular. The usual de nition, as is given in Core Standards, is that two fractions are equivalent if and only if they are represented by THE SAME POINT on the number-line. Hence, it seems to me that this standard is EXACTLY BACKWARDS.
- 4N20 If the product of the whole number represented in base-10 place-value notation by the sequence  $a_1 a_2 \dots a_m$  by 10 is  $a_1 a_2 \dots a_m 0$ , then this iterates to show that the product of  $a_1 a_2 \dots a_m$  by 10 × 10 is  $a_1 a_2 \dots a_m 00$  and so on. Thus, one needs ONLY the behavior of multiplication by 10. However, it will be impossible to explain this property unless students (and teachers) are usent with the expanded form.
- 4N21 Generally, such standards are mathematically worthless.
  - 4N There should be serious preparation for the standard multiplication and division algorithms by now. I very much doubt that 4N21 - 4N25 are up to this as they prT1<u>1</u>1earlierf2..<u>0</u>1Tf1.94T1<u>0</u>1Tf1.7763v69(ery)]TJMo0o1<u>1</u>vunl776j-T1<u>1</u>1T0.h110-