Supporting Developmental Students with Number Talks

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Math 094

- Six credit developmental math class – no credits for graduation
- Class meets four days a week, and has a mandatory discussion once a week
- Vertical redesign
- Flipped classroom
- Leaves time for many in-class activities
Two Solutions

Number Talks  Concept Mapping
Number Talks
What is the next name in the list?

ANN
Brad
CAROL
Dennis

A good TED talk to show that we aren’t kidding that math is about finding patterns

Roger Antonsen: Math is the hidden secret to understanding the world

http://www.ted.com/talks/roger_antonsen_math_is_the_hidden_secret_to_understanding_the_world
Start with the basics

Without counting individually, how many filled in circles are there?
Move to subtraction

- $43 - 17$
Multiplication

• 15 * 8

• Make sure to diagram what you are doing – this leads to understanding of the area model when talking about algebra topics
Other suggestions

This is one my students struggle with

\[ \frac{5}{3} \times 6 \]

Or

16\% \ of \ 25
What doesn’t belong

http://wodb.ca/numbers.html
How many ways can I write

$6x + 10$
More ideas

• Ask students what they struggle with
• Talk about common mistakes that you see
• Squaring a binomial
• Anyone else have things that work?
Challenges

• Older students start to get bored fast
• Students are hesitant to make mistakes
• Don’t give up if it isn’t working – try something new
Questions?