

Nix the Tricks NCTM Middle School Workshop

How would you solve the problems on your own?

How might a student solve these problems?

What are some possible misconceptions/errors?

What tricks might cause students to make mistakes?

1) $(-4) - 7$

2) $-7 - (-5)$

3)

$$\frac{8x}{30} = \frac{48}{18}$$

4) a) $7^2 + 7^3$

b) $(-8)^4 - (-8)^3$

5) $4x - 4(x + 2)$

Nix the Tricks NCTM Middle School Workshop

How would you solve the problems on your own?

What insights could you/students use to solve these problems?

How do those methods compare to traditional ones?

6) $12(2x + 4) - 3 = 141$

7) Jill had 72 candies.

She gave the same number to each of her three brothers.

There were 48 candies left over.

8) You have seven cups of dog food. You use two-thirds of a cup of food at each meal.

9) Fill in the blank with $<$, $>$ or $=$.

$$\frac{4}{9} \quad \frac{4}{5}$$

$$\frac{7}{9} \quad \frac{11}{13}$$

10)

$$\frac{4}{10} = \frac{32}{x}$$

$$\frac{15}{5} = \frac{y}{4}$$

11)

$$\frac{1}{2} = \frac{x + 20}{50}$$