

12/11

Dolly



isolate the variable

$$4(2x + 2)$$

regroup
express
rewrite using dist. prop

undo operations

- undo +
+ undo -
÷ undo ×
× undo ÷

algebraic expression

- not solve
- not evaluate

opposite = -4 +4
 -9 +9

There is no balanced scale!

If $x = 2$

$$4(2x + 2)$$

$$4(2(2) + 2)$$

$$4(4 + 2)$$

$$4(6) = 24$$

order of operations

Dist. prop:

$$4(2x + 2)$$

if $x = 2$

$$8x + 8$$

$$8(2) + 8 = 24$$

$$4 + (2x + 2)$$
$$4(2x + 2)$$

> not the same

Algebraic equation — is a balanced problem
with an unknown
(variable)

$$1(2x + 2) = 24$$

zero pairs
may go anywhere

Alg tiles

balanced
↓

$$\begin{array}{r} x + 2 = 5 \\ -2 \quad -2 \\ \hline x = 3 \end{array}$$

$$\begin{array}{r} x + 2 - x = 5 \\ +1 \quad +1 \\ -2 \quad 6 \\ -2 \\ \hline x = 4 \end{array}$$

