

Equations and Mental Math (1-6)

<u>solution of an equation</u>	Decode
Definition a # that makes an equation true	Example $x + 2 = 5$ $x = 3$ $3 + 2 = 5$ $5 = 5$ ✓

Example 2: Tell whether z is a solution.

$$z = 8$$

\neq is not equal to

I Do	I Do	We Do
$3z = 24$ $3 \cdot z = 24$ $3 \cdot 8 = 24$ $24 = 24$ yes	$\frac{48}{z} = 5$ $\frac{48}{8} = 5$ $6 \neq 5$ NO	$z - 2 = 6$ $8 - 2 = 6$ $6 = 6$ yes

Example 3: Find the value of each variable.

I Do	I Do	We Do
$4y = 20$ $4 \cdot y = 20$ $y = 5$	$15 - r = 6$ $r = 9$	$54 = 6k$ $6k = 54$ $k = 9$

I Do	I Do	We Do
$2 + t = 2$ $2 + 0 = 2$ $t = 0$	$5y = 5$ $5 \cdot 1 = 5$ $y = 1$	$0 = 11g$ $0 = 11 \cdot 0$ $g = 0$

Example 5: Find the value of each variable.

I Do	We Do
<p>You begin running the football on the 12 yard line. You run x number of yards, and you end up on the 36 yard line. How far did you run?</p> $12 + x = 36$ $x = 24 \text{ yards}$	<p>At noon on Saturday, you are 54 miles from home. Your family continues driving away from home until you are 72 miles from home. How far did you drive after Saturday?</p> $54 + x = 72$ $x = 18 \text{ miles}$

IXL Lessons: 6th Grade → Z.1, Z.2, Z.6, and the two Z bullet points that are new!