

ANSWERS Write Equations: What Equals What?

Equations are number sentences with equal signs. They show how two quantities are equal. One way of thinking about equations is that they are two expressions that have the same value and are joined by an equal sign.

$5 + 2 = 7$ is an equation The value of both sides is 7.

But so is this:

$5^2 (10-5) = 25 \times 5$ The value of both sides is 125.

and this:

$10(5-2) + 1 = 11 + 20$ The value of both sides is 31.

In this worksheet you will be given an expression and asked to write another expression of equal value to create an equation. Try to use multiplication, division, and exponents whenever possible. Get creative! Think about all the ways you can make a 1 by just subtracting one number from another, such as $9 - 8$.

Hint: First evaluate the expression. Then, find another way to write that number.

- $10 \times 3 + 5 =$ POSSIBLE ANSWERS: 7×5 OR $5^2 + 10$
- $10^2 + 1 =$ POSSIBLE ANSWERS: $5 \times 20 + 1$, $5(4 \times 5) + 1$, $5 \times 20 + (9-8)$
- $50 / 2 + 3 =$ POSSIBLE ANSWERS: $100 / 4 + 3$, $5^2 + 3$
- $10 \times 10 \times 10 + 30 =$ POSSIBLE ANSWERS $10^3 + 3(9 + 1)$
- $75 \times 2 =$ POSSIBLE ANSWERS 10×15 , $10^2 + 2 \times 5^2$