

Opening Exercise

Identify a value for the variable that would make each equation or inequality into a true number sentence. Is this the only possible answer? State when the equation or inequality is true using equality and inequality symbols.

1. $3 + g = 15$

$g = 12$

2. $30 > 2d$

$d < 15$

3. $\frac{15}{f} > 5$

$f < 3$

4. $42 \leq 50 - m$

~~$m = 8$~~ $m \leq 8$

Mar 12-5:59 AM

Now let's Play the
Matching Game to Practice
This!

Mar 12-8:08 AM

Example 1

Each of the following numbers, if substituted for the variable, makes one of the equations below into a true number sentence. Match the number to that equation: 3, 6, 15, 16, 44.

a. $n + 26 = 32$

b. $n - 12 = 32$

c. $17n = 51$

d. $4^2 = n$

e. $\frac{n}{3} = 5$

Mar 12-6:11 AM

Lesson Summary

Variable: A *variable* is a symbol (such as a letter) that represents a number (i.e., it is a placeholder for a number). A variable is a placeholder for "a" number that does not "vary."

Expression: An *expression* is a numerical expression, or a result of replacing some (or all) of the numbers in a numerical expression with variables.

Equation: An *equation* is a statement of equality between two expressions.

If A and B are two expressions in the variable x , then $A = B$ is an equation in the variable x .

Problem Set

Find the solution to each equation.

1. $4^3 = y$

2. $8a = 24$

3. $32 = g - 4$

4. $56 = j + 29$

5. $\frac{48}{r} = 12$

6. $k = 15 - 9$

7. $x \cdot \frac{1}{5} = 60$

8. $m + 3.45 = 12.8$

9. $1 = a^5$

Mar 12-6:12 AM

Exit Ticket

Find the solution to each equation.

1. $7f = 49$

2. $1 = \frac{r}{12}$

3. $1.5 = d + 0.8$

4. $9^2 = h$

5. $q = 45 - 19$

6. $40 = \frac{1}{2}p$

Mar 12-6:14 AM