numerical
coefficient
constant
variable

$3x + 6 = 12$

expression    expression

equation

Name _____

Per _____

## Solving Equations

To solve any equation: you must isolate the variable. This means to get the variable by _____.

To isolate the variable, use the inverse, or _____ operation of what is being done to the variable.

### Inverse operation of:

addition:

subtraction:

multiplication:

division:

1.  The Patriots had *p* points when they went into the fourth quarter and scored an additional 7 points in the game. They ended (and won) the game with 28 points. How many points did they have to start the fourth quarter?

*Let *p* = _____

**Write an equation:

_____  _____ _____ = _____

Solve:

2.  Mrs. Doolan had *x* pencils on Monday and gave 5 away. On Tuesday she had 16 pencils. How many pencils did Mrs. D have on Monday?

*Let *x* = _____

**Write an equation:

_____  _____  _____  =  _____

Solve:

3.  Pat babysat for the Gows on Saturday night for four hours and earned *d* dollars per hour. Pat earned $48. What is Pat's rate per hour?

*Let *d* = _____

**Write an equation:

_____  =  _____

Solve:

4.  The gym class had *s* students which Mrs. McCullough divided into 5 teams. Each team had 6 players. How many students are in the class?

*Let *s* = _____

**Write an equation:

_____  _____  _____  =  _____

Solve: