Name

Period & Class_____

Solve each equation.

1)
$$\frac{x}{3} = 5$$
 2) $\frac{4+v}{2} = 9$

3)
$$4 = 8 + \frac{n}{3}$$
 4) $4 + m - 7m = 22$

5)
$$52 = 2(1 + 5p)$$
 6) $|p| = 7$

7)
$$|b-9| - 3 = 16$$

8) $10|5-4x| = 30$

Solve each equation for the indicated variable.

9) u = kx, for x 10) u = 4 + 2a, for a

Solve each inequality and graph its solution.

Write an inequality for each graph.

13) -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7

Solve each inequality and graph its solution.

14) $3(3m+3) \le 36$ 4 -3 -2 -1 0 1 2 3 4 5 6

Solve each compound inequality and graph its solution.

15) $-3 < 1 + 4p \le 21$

Solve each inequality and graph its solution.

16) $|k+1| \le 2$ $\leftarrow -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6$

Write each as an algebraic expression.

17) 7 more than p is equal to 21

18) the quotient of n and 4 is 37

19) the product of n and 8 is 31

20) twice x is equal to 44