

Name \_\_\_\_\_

## Multi-Step Equations and Proportions

Period \_\_\_\_\_ Group \_\_\_\_\_

**Solve each equation.**

1)  $3v + 4 - 3 = -17$

2)  $-4b + 5b = -6$

3)  $-(n + 1) = -7 - 2n$

4)  $8(a + 1) = 7a + 2$

5)  $13 - 7x = -2(1 + 2x)$

6)  $35 - 5k = 4(k - 7)$

7)  $-3(-10 + p) = 8(p + 9) + 10p$

8)  $-6(3x - 8) + 6(x + 4) = -12x - 6x$

**Solve each proportion.**

9)  $\frac{6}{b} = \frac{3}{6}$

10)  $\frac{6}{5} = \frac{8}{r}$

11)  $\frac{7}{3} = \frac{n}{6}$

12)  $\frac{8}{4} = \frac{5}{m}$

13)  $\frac{5}{n} = \frac{7}{2}$

14)  $\frac{4}{5} = \frac{8}{x}$

15)  $\frac{a}{a-3} = -\frac{8}{4}$

16)  $\frac{v}{v-9} = \frac{2}{4}$

17)  $\frac{x+12}{x} = -\frac{3}{9}$

18)  $\frac{10}{n+1} = \frac{12}{n}$

19)  $\frac{10}{x+2} = \frac{9}{x+8}$

20)  $\frac{k+3}{k+12} = \frac{3}{11}$