NAME: Period:

Notes 4-1

Int 1 **Solving One-Step Equations** **Unit 4**

Inverse Operations: Operations that "UNDO" each other.

↓ Opposite.

- Add & Subtract +/− are inverse operations.
- Multiply & Divide • ÷ are inverse operations.

STEPS to Solving Equations:

1) Circle your variable & set up your lines.

2) Use INVERSE operations to get the variable alone.

3) Solve with the variable in your answer. $x = \_\_$

4) CHECK your answer by plugging it back into the original problem.

Solve the following equations:

1) $x + 42 = 79$

$x + 42 = 79$
$-42 \quad -42$
$x = 35$

CHECK:
$35 + 42 = 79$ ✓

2) $85 = y + 19$

$85 = y + 19$
$-19 \quad -19$
$66 = y$ or $y = 66$

CHECK:
$85 = 66 + 19$ ✓

3) $62 = r - 18$

$62 = r - 18$
$+18 \quad +18$
$80 = r$ or $r = 80$

CHECK:
$62 = 80 - 18$ ✓

4) $704 = j - 112$

$704 = j - 112$
$+112 \quad +112$
$816 = j$ or $j = 816$

CHECK:
$704 = 816 - 112$ ✓

5) $y - (-60) = 298$

$y + 60 = 298$
$-60 \quad -60$
$y = 238$

CHECK:
$238 - (-60) = 298$ ✓

6) $h + (-801) = 93$

$h - 801 = 93$
$+801 \quad +801$
$h = 894$

CHECK:
$894 + (-801) = 93$ ✓

7) $-9 + g = -15$

$-9 + g = -15$
$+9 \quad +9$
$g = -6$

CHECK
$-9 + -6 = -15$ ✓

8) $20 = -17 + b$

$20 = -17 + b$
$+17 \quad +17$
$37 = b$ or $b = 37$

CHECK:
$20 = -17 + 37$ ✓

9) $65 = 5w$

$65 = 5w$

$\frac{65}{5} = \frac{5w}{5}$

$13 = w$ or $w = 13$

CHECK: $65 = 5 \cdot 13$ ✓

10) $-11r = 77$

$\frac{-11r}{-11} = \frac{77}{-11}$

$r = -7$

CHECK: $-11 \cdot -7 = 77$ ✓

11) $\frac{p}{4} = 11$

$4 \cdot \frac{p}{4} = 11 \cdot 4$

$p = 44$

CHECK: $\frac{44}{4} = 11$ ✓

12) $\frac{n}{-4} = 7$

$-4 \cdot \frac{n}{-4} = 7 \cdot -4$

$n = -28$

CHECK: $\frac{-28}{-4} = 7$ ✓

13) $\frac{d}{-3} = -12$

$-3 \cdot \frac{d}{-3} = -12 \cdot -3$

$d = 36$

CHECK: $\frac{36}{-3} = -12$ ✓

14) $\frac{a}{5} = -12$

$5 \cdot \frac{a}{5} = -12 \cdot 5$

$a = -60$

CHECK: $\frac{-60}{5} = -12$ ✓

15) $-8c = -64$

$\frac{-8c}{-8} = \frac{-64}{-8}$

$c = 8$

CHECK: $-8 \cdot 8 = -64$ ✓

16) $\frac{g}{-9} = 3$

$-9 \cdot \frac{g}{-9} = 3 \cdot -9$

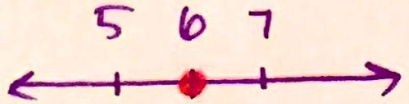
$g = -27$

CHECK: $\frac{-27}{-9} = 3$ ✓

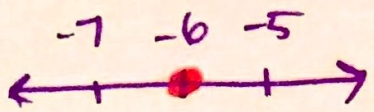
Graph the following: Instructions: →

Remember:
1) Straight line
2) At least three numbers
3) Number from least to greatest.
4) Equal sign means solid dot.

17) $x = 6$



18) $y = -6$



19) $-37 = h$