Expression, Equations, and Inequalities Leveled Work Name: _____

If you do not complete a C-Level Grade you will receive a 0 for today's assignment.

**Expressions and Distribution- Distribute and Simplify**

| | |
|---|---|
| 1. $-2(5x + 2b) - (6x - 1b)$ | 2. $\frac{2}{3}(9c + 6) + 2c - (3c - 12)$ |
| 3. $4(\frac{1}{2} + 2d) + 2(5d - 8)$ | 4. $-3(x + \frac{5}{9}) - 4x + \frac{1}{3}(9x - \frac{3}{9})$ |
| 5. $-4(x+2) - \frac{1}{2}(2x - 6)$ | 6. $-8x - 2(5 + 4x)$ |

**Word Problems: Create the equation for each problem**

1. Mike sold half of his comic books and then bought 7 more. He now has fifteen. How many did he begin with?

| Equation | Solved Answer |
|---|---|
| | |

2. 382 students went on a trip to the zoo. 7 buses were filled and four students had to ride in cars. How many students were on each bus?

| Equation | Solved Answer |
|---|---|
| | |

3. You bought a magazine for $5 and some notepads for $3 each. You spent a total of $26. How many notepads did you buy?

| Equation | Solved Answer |
|---|---|
| | |

4. Ashley won 40 lollipops playing games at her school's game night. Later, she gave 2 to each of her friends. She only has four remaining. How many friends does she have?

| Equation | Solved Answer |
|---|---|
| | |

5. Jasmine's cell phone company charges her $35 a month for phone service plus $0.50 for each text message. How many texts did she send in a month if her bill was $52?

| Equation | Solved Answer |
|---|---|
| | |

6. An online retailer charges $6.99 plus $0.55 per pound to ship electronic purchases. How many pounds is a DVD player for which the shipping charge is $11.94?

| Equation | Solved Answer |
|---|---|
| | |

7. A girl read a book that had 1,159 pages. She read 72 pages on the first day. She then read 40 pages per day until she finished the book. Which equation can be used to find the number of days, *d*, it took her to read the book?

| Equation | Solved Answer |
|---|---|
| | |

8. Caitlyn is saving for vacation. She already has $38 and plans to save $18 per week until she reaches her goal of $524. Caitlyn's total savings, *s*, can be determined using this equation, where *w* represents the number of weeks she saves.

$S = 18w + 38$

How many weeks will Caitlyn need to save to reach her goal of $524?

**Inequalities- Solve the Inequality and Match the Graph to Problem**

1. $-3x - 8 < 16$

2. $\frac{-2}{3}x - 6 \leq -8$

3. $-4x - 2 \geq -14$

4. $7 - 5x > 2$

5. $-10 > 4 + 2x$

6. $4x - 2 > -18$

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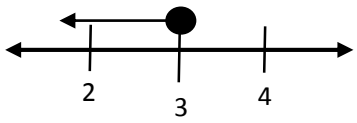


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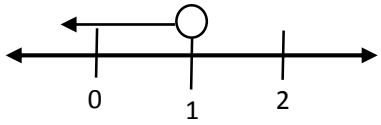


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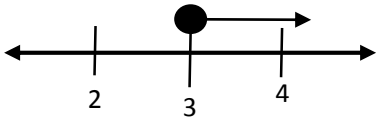


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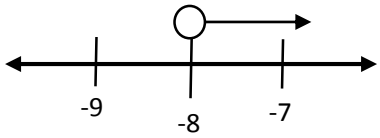


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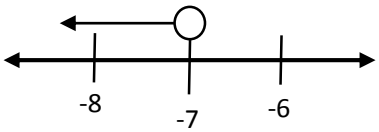


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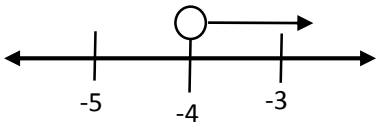

Expression, Equations, and Inequalities Leveled Work Name: _____

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**Expressions and Distribution- Distribute and Simplify**

| | |
|---|---|
| 1. $-2(5x + 2b) - (6x - 1b)$<br><br>$-16x - 3b$ | 2. $\frac{2}{3}(9c + 6) + 2c - (3c - 12)$<br><br>$5c + 16$ |
| 3. $4(\frac{1}{2} + 2d) + 2(5d - 8)$<br><br>$18d-14$ | 4. $-3(x + \frac{5}{9}) - 4x + \frac{1}{3}(9x - \frac{3}{9})$<br><br>$-4x - \frac{16}{9}$ |
| 5. $-4(x+2) - \frac{1}{2}(2x - 6)$<br><br>$-5x - 5$ | 6. $-8x - 2(5 + 4x)$<br><br>$-16x - 10$ |

**Word Problems: Create the equation for each problem**

1. Mike sold half of his comic books and then bought 7 more. He now has fifteen. How many did he begin with?

| Equation | Solved Answer |
|---|---|
| | X = 16 |

2. 382 students went on a trip to the zoo. 7 buses were filled and four students had to ride in cars. How many students were on each bus?

| Equation | Solved Answer |
|---|---|
| | X = 54 |

3. You bought a magazine for $5 and some notepads for $3 each. You spent a total of $26. How many notepads did you buy?

| Equation | Solved Answer |
|---|---|
| | X = 7 |

4. Ashley won 40 lollipops playing games at her school's game night. Later, she gave 2 to each of her friends. She only has four remaining. How many friends does she have?

| Equation | Solved Answer |
|---|---|
| | X = 18 |

5. Jasmine's cell phone company charges her $35 a month for phone service plus $0.50 for each text message. How many texts did she send in a month if her bill was $52?

| Equation | Solved Answer |
|---|---|
| | x = 34 |

6. An online retailer charges $6.99 plus $0.55 per pound to ship electronic purchases. How many pounds is a DVD player for which the shipping charge is $11.94?

| Equation | Solved Answer |
|---|---|
| | x = 9 |

7. A girl read a book that had 1,159 pages. She read 72 pages on the first day. She then read 40 pages per day until she finished the book. Which equation can be used to find the number of days, *d*, it took her to read the book?

| Equation | Solved Answer |
|---|---|
| | D = 27.17 28 days |

8. Caitlyn is saving for vacation. She already has $38 and plans to save $18 per week until she reaches her goal of $524. Caitlyn's total savings, *s*, can be determined using this equation, where *w* represents the number of weeks she saves.

$S = 18w + 38$

How many weeks will Caitlyn need to save to reach her goal of $524?

**Inequalities- Solve the Inequality and Match the Graph to Problem**

1. $-3x - 8 < 16$
2. $\frac{-2}{3}x - 6 \leq -8$
3. $-4x - 2 \geq -14$
4. $7 - 5x > 2$
5. $-10 > 4 + 2x$
6. $4x - 2 > -18$

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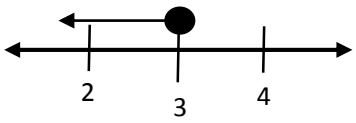


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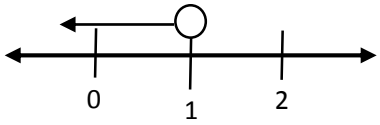


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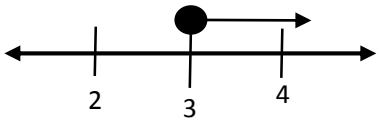


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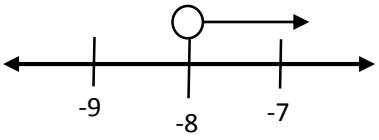


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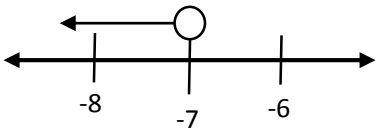

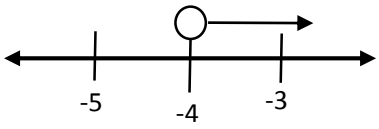
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