**Part A: Multiple Choices: Instructions:** Choose the option that completes the sentence or answers the question.

1. The solution to the equation |x + 2| = 7 is
2. {5}
3. {$-$9}
4. {$-$9, 5}
5. ∅

1. The solution to the equation 5|c – 2| = 20
2. {4, $-$4}
3. {$-$2, 6}
4. {3, $-$3}
5. ∅
6. The solution to the inequality |5 – 4x| + 2 < 6
7. $\frac{1}{4}<x<\frac{9}{4}$
8. $\frac{1}{4}<x<\frac{19}{4}$
9. $-\frac{1}{4}<x<\frac{9}{4}$
10. $\frac{3}{2}<x<\frac{9}{4}$
11. The solution to the inequality |2x + 3| < x + 6
12. $3<x<4$
13. $-3<x<3$
14. $-$5 < *x* < 5
15. $x< -3 or x>3$

**Part B: Short Answer: Instructions:** Answer the question below.

You have money in your wallet, but you don't know the exact amount. When a friend asks you, you say that you have 50 dollars give or take 15. Use an absolute value equation to find least and biggest amount of money in your pocket?

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**Part B: Short Answer: Instructions:** Answer the question below.

Your have money in your wallet, but you don't know the exact amount. When a friend asks you, you say that you have 50 dollars give or take 15. Use an absolute value equation to find least and biggest amount of money in your pocket?

Let x be the possible amount of money in your pocket.

|x $-$ 50| = 15

|  |  |
| --- | --- |
| Equation #1x $-$ 50 = 15x $-$ 50 + 50 = 15 + 50x = 65 | Equation #2x $-$ 50 = $-$15x $-$ 50 + 50 = $-$15 + 50x = 35 |

The least amount is 35 dollars and the biggest amount is 65 dollars.