Name: _____

Score:

Solve the Absolute Value Equation

T1ES1

Solve each equation. In case of no solution, write \emptyset (null set).

1) $ -x = 3$	2) - -x = 5	3) x = 9
Solution =	Solution =	Solution =
4) $ x = -6$	5) x = 4	$6) \frac{ x }{4} = 6$
Solution =	Solution =	Solution =
7) $ -x = -5$	8) $ x = -10$	9) x = 15
Solution =	Solution =	Solution =
10) $ x = 8$	$ 11 \rangle - x = -9$	12) $ -x = 2$
Solution =	Solution =	Solution =
13) $ -x = -11$	14) $ x = 6$	15) <i>x</i> = 13
Solution =	Solution =	Solution =
16) $ x = 7$	17) $ -x = 5$	18) $ x = -4$
Solution =	Solution =	Solution =
$19) \frac{ x }{2} = -1$	20) $3x$ = 9	21) $ -x = -10$
Solution =	Solution =	Solution =
22) <i>x</i> = 15	23) $- x = 1$	24) <i>x</i> = 12
Solution =	Solution =	Solution =

Name: _____

Answer key

Score:

Solve the Absolute Value Equation

T1ES1

1)
$$|-x| = 3$$

2)
$$-|-x| = 5$$

3)
$$|x| = 9$$

Solution =
$$\{-3, 3\}$$

Solution =
$$\{-9, 9\}$$

4)
$$|x| = -6$$

5)
$$|x| = 4$$

6)
$$\frac{|x|}{4} = 6$$

Solution =
$$\{-4, 4\}$$

Solution =
$$\{-24, 24\}$$

7)
$$|-x| = -5$$

8)
$$|x| = -10$$

9)
$$|x| = 15$$

Solution =
$$\emptyset$$
10) $|x| = 8$

Solution =
$$\emptyset$$

11) $-|x| = -9$

Solution =
$$\{-15, 15\}$$

12) $|-x| = 2$

Solution = $\{-9, 9\}$

Solution =
$$\{-2, 2\}$$

13)
$$|-x| = -11$$

Solution = $\{-8, 8\}$

14)
$$|x| = 6$$

15)
$$|x| = 13$$

Solution =
$$\{-6, 6\}$$

Solution =
$$\{-13, 13\}$$

16)
$$|x| = 7$$

17)
$$|-x| = 5$$

18)
$$|x| = -4$$

Solution =
$$\{-7, 7\}$$

Solution =
$$\{-5, 5\}$$

Solution =
$$\emptyset$$

19)
$$\frac{|x|}{2} = 1$$

20)
$$|3x| = 9$$

21)
$$|-x| = -10$$

Solution =
$$\{-2, 2\}$$

Solution =
$$\{-3, 3\}$$

22)
$$|x| = 15$$

23)
$$-|x| = 1$$

24)
$$|x| = 12$$

Solution =
$$\{-15, 15\}$$

Solution =
$$\{-12, 12\}$$