

HW 1-8

Int 2

Absolute Value Equations

Unit 1

Evaluate. Give the exact value. (Leave as a fraction in simplest form or as a whole number. NO DECIMALS)

1. $21 - |3 - 11| \div 2$

17

2. $(|-7 + 4| \times 5 - 2) \div 6$

3. $\frac{10 + 16 \div |4 - 6|}{4 + 2^2 - 15 + 4}$

-6

Solve. Give the exact value of the variable (Leave as a fraction in simplest form or as a whole number. NO DECIMALS)

4. $|x| = 6$

5. $|x| = 20$

6. $|x - 3| = 17$

$$x = -20, 20$$

7. $2|x + 7| = 16$

$$x = -15, 1$$

8. $5|x - 4| = 15$

9. $|2x + 9| = 30$

$$x = \frac{21}{2}, -\frac{39}{2}$$

10. $|x + 11| + 12 = 54$

11. $|x + 6| - 14 = 2$

12. $|x| + 3 = 16$

$$x = -22, 10$$

$$13. \frac{|x+5|}{3} = 6$$

$$X = -23, 13$$

$$14. \frac{|x+7|}{6} = 4$$

$$15. 8|4x-3| - 21 = 43$$

$$X = -\frac{5}{4}, \frac{11}{4}$$

$$16. -5|x+4| = -45$$

$$17. |2-x| = 1$$

$$18. |3x-7| - 9 = -7$$

$$X = 1, 3$$

$$19. |2x+5| = -6$$

NO

SOLUTION

$$20. \frac{|x|-6}{2} = 12$$

$$21. 3|x| - 16 = -1$$

$$X = -5, 5$$

$$22. |3x+11| + 23 = 7$$

$$23. 4|16-x| - 6 = 10$$

$$24. 7 + \frac{|2x|}{3} = 19$$

$$X = 12, 20$$