

# Chapter 1.2 - Homework

## Absolute Value

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1. Arrange these values in order, from least to greatest:  $|-5|, |20|, |-15|, |12|, |-25|$

The values from least to greatest is:  $|-5|, |12|, |-15|, |20|, |-25|$

2. Evaluate.

a)  $|-22| = 22$

c)  $|-5 - 13| = 18$

e)  $\frac{|-8|}{-4} = -2$

b)  $-|-35| = -35$

d)  $|4 - 7| + |-10 + 2| = 11$

f)  $\frac{|-22|}{|-11|} + \frac{-16}{|-4|} = -2$

3. Express using absolute value notation.

a)  $|x| > 3$

b)  $|x| \leq 8$

c)  $|x| \geq 1$

d)  $|x| \neq 5$

4. Graph on a number line.

Done on paper

5. Rewrite using absolute value notation.

a)  $|x| \leq 3$

b)  $|x| > 2$

c)  $|x| \geq 2$

d)  $|x| < 4$

7. Graph the following functions.

Done on paper

8. Compare the graph in questions 7. How could you use transformations to describe the graph of  $f(x) = |x + 3| - 4$

Done on paper