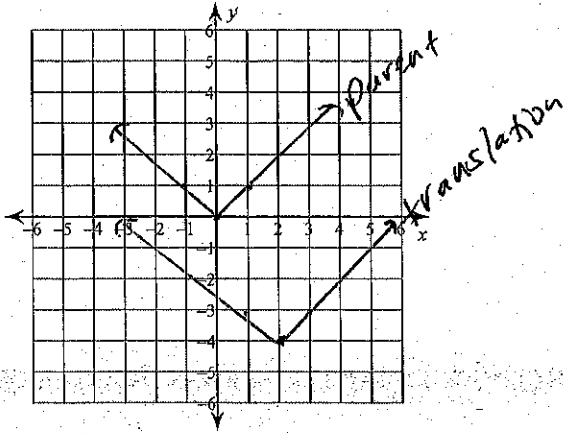


# Graphing Absolute Value Functions

Graph each equation.

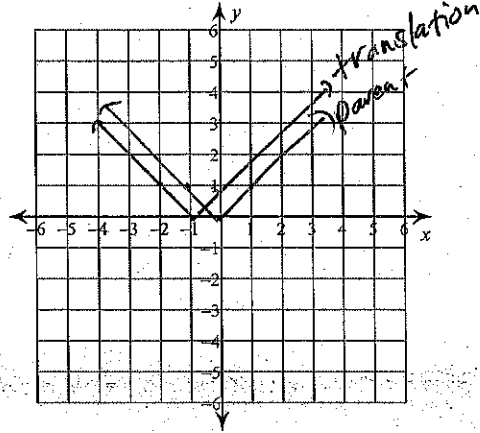
1)  $y = |x - 2| - 4$

*right 2  
down 4*



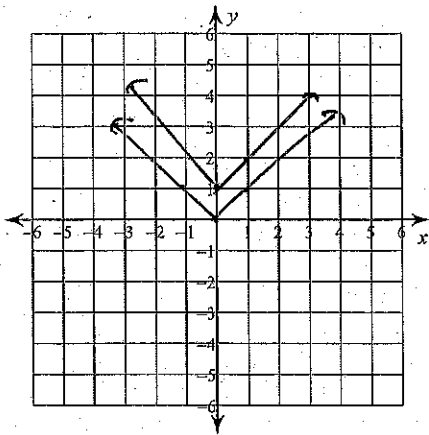
2)  $y = |x + 1|$

*left 1*



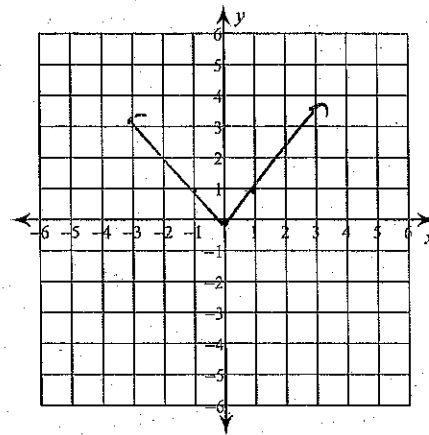
3)  $y = |x| + 1$

*up 1*



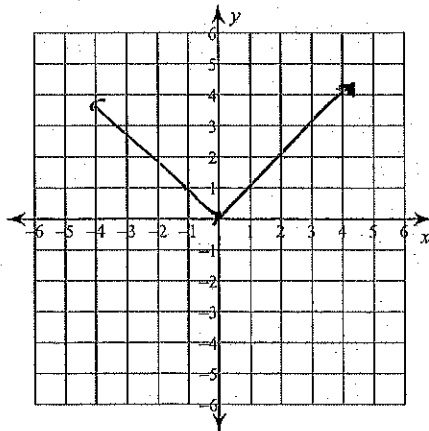
4)  $y = |x| + 2$

*up 2*



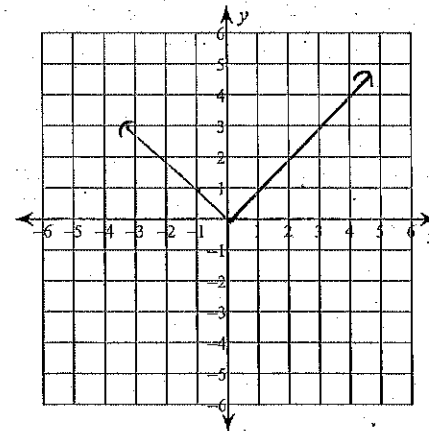
5)  $y = |x + 2|$

*left 2*



6)  $y = |x + 1| + 3$

*left 1 up 3*



# Can You Spot Any Errors?

Grader \_\_\_\_\_

Here is Jim's quiz paper. Make an answer key for the quiz, placing your answers, and any work, at the bottom of the page. Using your key, grade Jim's quiz paper. Deduct 10 points for each wrong answer and place his grade in the box.

Name: Jim Nasium

Answers rounded to three decimal places where needed.

Quiz Grade:  10
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- ~~1.~~  $(5^3)^{-1} = -125$       $\frac{1}{5^3} = \frac{1}{125}$      ~~2.~~  $(16)^{\frac{1}{4}} = 4$       $\sqrt[4]{16} = 2$   
~~3.~~  $(-2)^{\frac{4}{3}} = 2.520$       $(\sqrt[3]{-2})^4$      ~~4.~~  $(81)^{\frac{1}{2}} = -9 = \frac{1}{81^{\frac{1}{2}}} = \frac{1}{9}$   
~~5.~~  $(49)^{-2} = \frac{1}{7} = \frac{1}{49^2} = \frac{1}{2401}$      6.  $(64)^{\frac{2}{3}} = 16$       $(\sqrt[3]{64})^2 = 4^2 = 16$   
~~7.~~  $(81)^{\frac{1}{4}} \cdot (2)^{-1} = 2$       $\sqrt[4]{81} \cdot \frac{1}{2}$      ~~8.~~  $(3)^{\frac{1}{2}} \cdot (2)^{\frac{1}{2}} = \frac{3}{2}$       $\sqrt{3} \cdot \sqrt{2} = \sqrt{6}$   
~~9.~~  $(100)^{\frac{1}{2}} \cdot (25)^{-2} = \frac{1}{25}$      ~~10.~~  $(100^{\frac{1}{2}})^2 = 10$   
 $\sqrt{100} \cdot \frac{1}{25^2} = 10 \cdot \frac{1}{625} = \frac{2}{125}$       $(\sqrt{100})^2 = 10^2 = 100$

### Answer Key:

1.	$\frac{1}{125}$	2.	2
3.	$\approx -2.520$	4.	$\frac{1}{9}$
5.	$\frac{1}{2401}$	6.	16
7.	$\frac{3}{2}$	8.	$\sqrt{6}$
9.	$\frac{2}{125}$	10.	100