Intermediate Algebra
Chapters 1 and 2 Practice Test, Non-Calculator

I. Evaluate the following expressions.

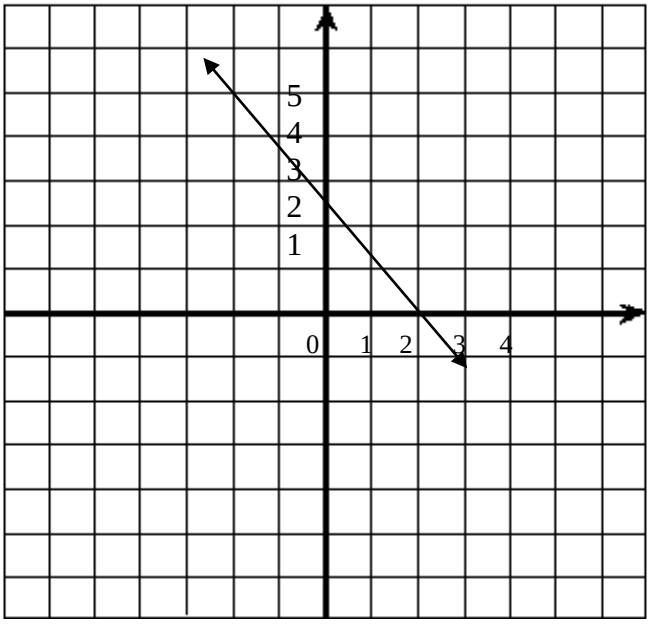
1. $\frac{2}{3} - \frac{1}{6} \cdot 4 =$ 2. $7 - 2^3 + 3 =$ 3. $\frac{\frac{-1}{2}}{\frac{2}{3}} + \frac{1}{4} =$

II. Scientific Notation.

4. Write 1.76×10^{-5} in standard form.
5. Write 246,100,000 using scientific notation.

III. Evaluate.

6. Use the graph of *f* to evaluate:
   a) $f(2)$
   b) $f(-2)$



IV. Use the following relationship S to answer the following questions:

S = {(− 15, 25), (−5, −30), (0, −5), (5, −10), (10, 15)}

7. Make a scatter plot of S. Remember to label the axes.
8. Write the domain of S.
9. Write the range of S.

V. Sketch.

10. Sketch the graph of $f(x) = 2x - 4$. Remember to label the axes.

VI. Determine whether the table of f represents a linear function.

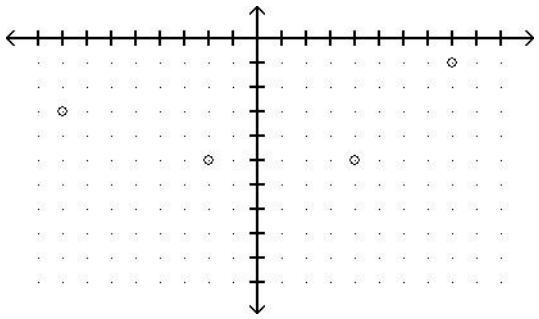
11.

x	**1**	**2**	**3**	**4**	**5**
y	**-1**	**1**	**3**	**5**	**7**

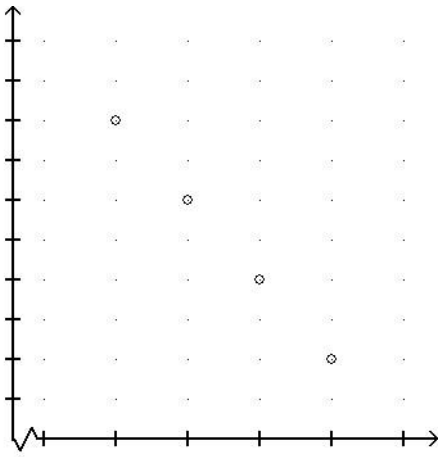
Intermediate Algebra
Chapters 1 and 2 Practice Test, Non-Calculator

VII. Express the relation shown in the graph as a set of ordered pairs. Identify the domain and range.

12. [−10, 10, 1] by [−10, 0, 1]



13. [1950, 2000, 10] by [0, 100, 10]



Answers:

1. 0
2. 2
3. $\frac{-1}{2}$
4. 0.0000176
5. 2.461×10^8
6. a) 0 b) 5
8. D = {-15, -5, 0, 5, 10}
9. R = {-30, -10, -5, 15, 25}
11. linear function
12. $S = \{(8,-1),(4,-5),(-8,-3),(-2,-5)\}$
    $D = \{-8,-2,4,8\}$
    $R = \{-5,-3,-1\}$
13. $S = \{(1960,80),(1970,60),(1990,20),(1980,40)\}$
    $D = \{1960,1970,1980,1990\}$
    $R = \{20,40,60,80\}$