

S-1

Summary of Chapter One.

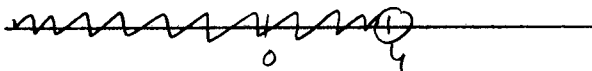
Use the correct order of operations to find the value of the given expressions. Write out all the steps in your solutions.

1. $5 + 2 \cdot 3 = 5 + 6 = 11$

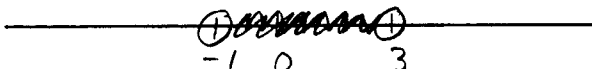
2. $12/4 + 3\left(\frac{11+4}{5}\right) = 3 + 3 \cdot \left(\frac{15}{5}\right) = 3 + 3 \cdot (3) = 3 + 9 = 12$

Graph all the real numbers on the number line that satisfy the given conditions. Be careful to mark correctly any endpoints.

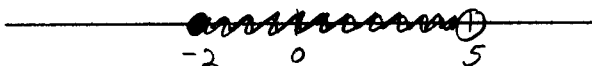
3. $x < 4$



4. $-1 < x < 3$



5. $5 > x \geq -2$

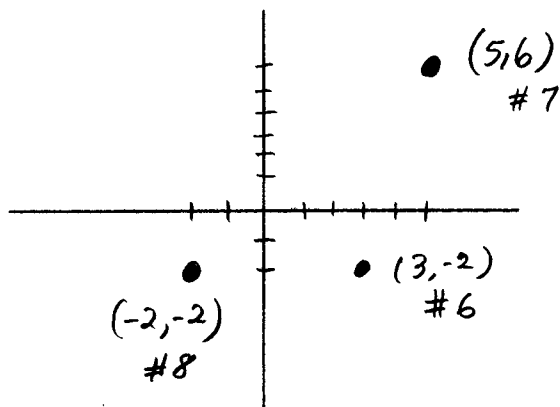


Plot each point in the Cartesian plane.

6. $(3, -2)$

7. $x = 5$ with $y = 2x - 4$ so $(5, 6)$
 $y = 10 - 4 = 6$

8. $x = -2$ with $y = 3x^2 + 7x$ so $(-2, -2)$
 $y = 3(4) + (-14)$
 $= 12 - 14 = -2$



Translate each statement into an algebraic expression. Be sure to state what quantity each letter represents.

9. The product of one number by three more than another number is twenty-one.

let x be the first number and
 y be the other one

$$x \cdot (3 + y) = 21$$

10. Tim has twenty-six dollars more than Bill.

let x be Bill's \$
 y be Tim's \$

$$y = x + 26$$