

## Algebra

## Topic: Word Problems

Name: Date: If  $p = -2$ ,  $q = -1$  and  $r = 3$ , find the value of:

1.  $p^2 + q^2 - r^2 =$

2.  $2p^2 - q^2 + 3r^2 =$

3.  $p - q - r =$

4.  $p^4 + q^4 - r^4 =$

5.  $p^3 + q^3 + r^3 + 3pqr =$

6. The side of an equilateral triangle is shown by  $l$ . Express the perimeter of the equilateral triangle using  $l$ .

7. The side of the regular hexagon is denoted by  $l$ . Express the perimeter of the hexagon using  $l$ .

8. A cube is three dimensional figure. It has six faces and all of them are identical squares. The length of an edge of the cube is given by  $l$ . Find the formula for the total length of the edges of a cube.

9. Write the constant term of  $3x^2 + 5x + 8$ .

10. Write the constant term of  $2x^2 - 9$ .

