Pre-Calculus Placement Test

Section 1

Solve each equation below.

1. $7x - 3(x+6) = -2$

2. $x^2 + 5x = 0$

Write the equation for each line below.

3. Write the equation for the line crossing the point $(0, -4)$ and with slope $= 2$.

4. The line crossing the points $(1, 1)$ and $(2, -1)$.

Answer each question below.

5. In the equation $w = 3vu + q$, find the value of w when $q = -1$, $u = 2$, and $v = -3$.

6. Solve for x in the equation $z = bx + cy$.

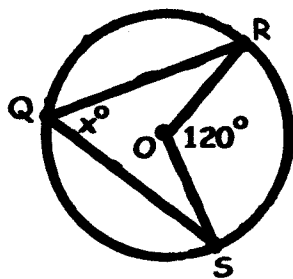7. Find $f(-2)$ for the function $f(x) = 2x^2 - 8x$.

Graph each two-variable equation below.

8. $y + x = 4$

9. $y = -2x^2$

10. $x^2 + y^2 = 9$

Find the missing quantities in each picture below. Make sure to fully simplify your answers.

11. Find x

12. If $\ell_1 \parallel \ell_2$, find $s + t$.