

**UNIT 2 WORKSHEET 19**  
**FINDING THE EQUATION OF A QUADRATIC FUNCTION**

**Find the equation of a parabola that opens up, and has the following x intercepts.**

- 1) (-3,0) and (4,0)                      2) (-12,0) and (-3,0)                      3) (2,0) and (5,0)

**Find the equation of a parabola that opens down, and has the following x intercepts.**

- 4) (-2,0) and (6,0)                      5) (1,0) and (7,0)                      6) (5,0)

7) Find the equation of a parabola that has a vertex of (-3,2) and contains the point (4,7).

8) Find the equation of a parabola that has a vertex of (4,5) and contains the point (-2,-2).

9) Find the equation of a parabola that has a vertex of (-2,-3) and contains the point (4,1).

10) Find the equation of a parabola that has a vertex of (0,3) and passes the x axis at (7,0).

- 11) Find the equation of a parabola that has a vertex of  $(3,-1)$  and has a y intercept of  $(0,-8)$ .
- 12) Find the equation of a parabola that has a vertex of  $(5,0)$  and has a y intercept of  $(0,-12)$ .
- 13) Find the equation of a parabola that passes through  $(1,6)$ ,  $(2,5)$  and  $(0,5)$ .
- 14) Find the equation of a parabola that passes through  $(0,6)$ ,  $(2,2)$  and  $(5,11)$ .

**15)** Find the equation of a parabola that passes through  $(3,-10)$ ,  $(4,0)$  and  $(6,8)$ .

**16)** Find the equation of a parabola that passes through  $(0,6)$ ,  $(-6,0)$  and  $(2,16)$ .