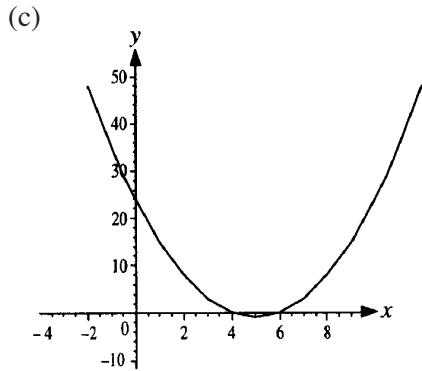


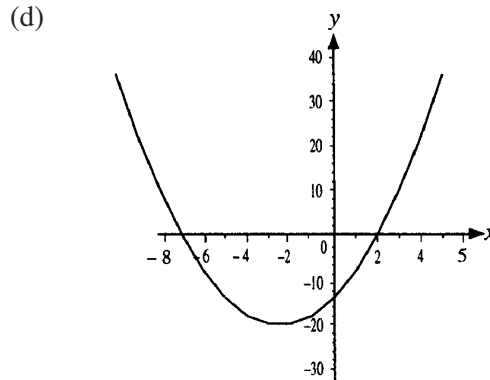
Quadratic Equations

Answers

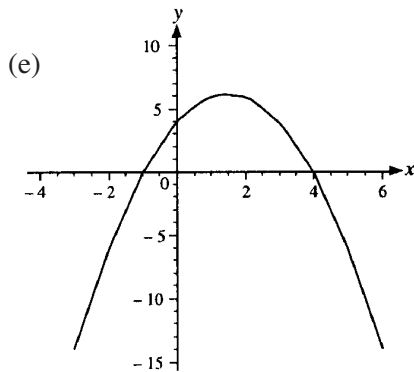
3



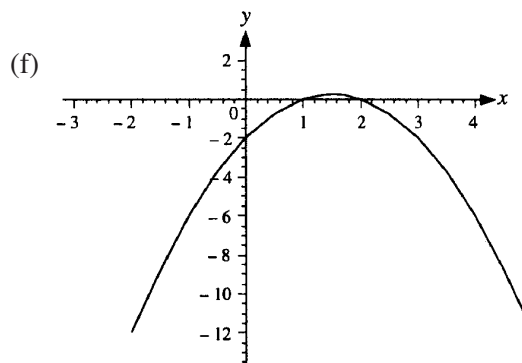
$y = 0$ when $x = 4$ and 6 ;
the minimum value of y is -1 .



$y = 0$ when $x = 2$ and -7 ;
the minimum value of y is -20.25



$y = 0$ when $x = 4$ and -1 ;
the minimum value of y is 6.25 .



$y = 0$ when $x = 1$ and 2 ;
the minimum value of y is 0.25 .

6. The maximum height of the ball is 11.

7. (a) $a = -2$, $b = -2$; the minimum value is -2 .

(b) $x = 3.41$ and $x = 0.59$

8. (a) $(x + 3)(x - 1)$

(b) $(x + 1)^2 - 4$

(c)

9. (a) $2(x - 1)^2 - 15$

(b) $x = 1 \pm \sqrt{\frac{15}{2}}$

(c) $x - \sqrt{\frac{15}{2}} < x < 1 + \sqrt{\frac{15}{2}}$

(d) -15 (e) 1

10. (a) $\frac{9}{16}$

(b) 1.29, 0.310 to 3 significant figures

