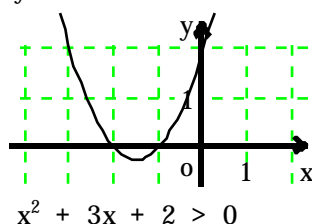


1. 次のグラフから、2次不等式の解を読み取りなさい。

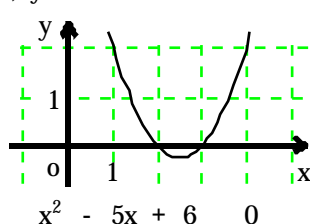
(1) $y = x^2 + 3x + 2$



$x^2 + 3x + 2 > 0$

$x^2 + 3x + 2 < 0$

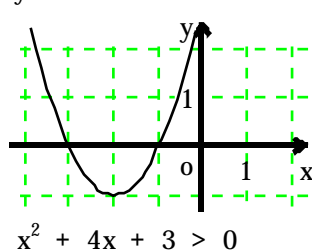
(2) $y = x^2 - 5x + 6$



$x^2 - 5x + 6 > 0$

$x^2 - 5x + 6 < 0$

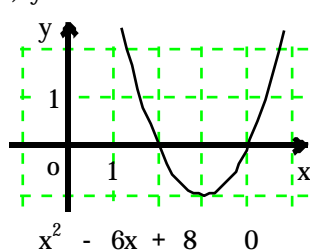
(3) $y = x^2 + 4x + 3$



$x^2 + 4x + 3 > 0$

$x^2 + 4x + 3 < 0$

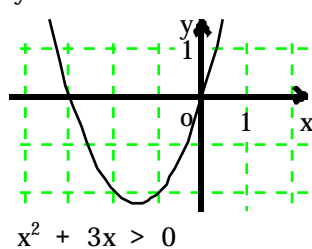
(4) $y = x^2 - 6x + 8$



$x^2 - 6x + 8 > 0$

$x^2 - 6x + 8 < 0$

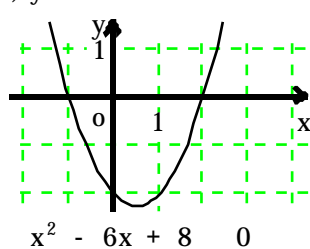
(5) $y = x^2 + 3x$



$x^2 + 3x > 0$

$x^2 + 3x < 0$

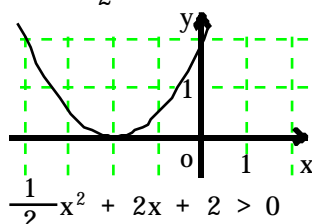
(6) $y = x^2 - x - 2$



$x^2 - x - 2 > 0$

$x^2 - x - 2 < 0$

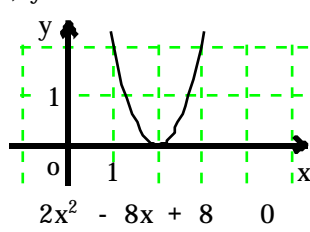
(7) $y = \frac{1}{2}x^2 + 2x + 2$



$\frac{1}{2}x^2 + 2x + 2 > 0$

$\frac{1}{2}x^2 + 2x + 2 < 0$

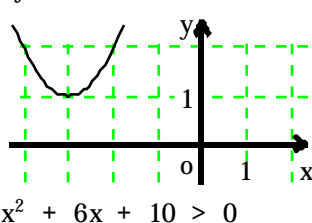
(8) $y = 2x^2 - 8x + 8$



$2x^2 - 8x + 8 > 0$

$2x^2 - 8x + 8 < 0$

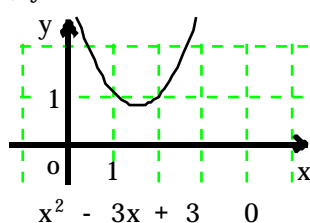
(9) $y = x^2 + 6x + 10$



$x^2 + 6x + 10 > 0$

$x^2 + 6x + 10 < 0$

(10) $y = x^2 - 3x + 3$



$x^2 - 3x + 3 > 0$

$x^2 - 3x + 3 < 0$

2. 次の2次方程式を因数分解を利用して解きなさい。

(1) $x^2 + 3x + 2 = 0$

(2) $x^2 - 5x + 6 = 0$

(3) $x^2 + 4x + 3 = 0$

(4) $x^2 - 6x + 8 = 0$

(5) $x^2 + 3x = 0$

(6) $x^2 - x - 2 = 0$

3. 次の2次方程式の解がないことを示せ。

(1) $x^2 + 6x + 10 = 0$

(2) $x^2 - 3x + 3 = 0$

4. 次の2次不等式を解きなさい。

(1) $x^2 - 5x > 0$

(2) $x^2 - 1 < 0$

(3) $x^2 + 6x + 9 > 0$

(4) $x^2 + 2x + 1 > 0$

(5) $x^2 - 4x - 5 > 0$

(6) $x^2 - 2x + 3 > 0$

(7) $x^2 + 4x + 4 > 0$

(8) $x^2 - 4x + 3 < 0$

(9) $x^2 - 5x + 7 > 0$

(10) $x^2 + 8x + 16 < 0$