ULANGKAJI TINGKATAN 4

BAB 1 : FUNGI DAN PERSAMAAN KUADRATIK

(10 soalan: Isi dalam bulatan)

NAMA GURU:

SUBJEK: MATEMATIK

NAMA PELAJAR:

KELAS:

1. Antara berikut, yang manakah ialah ungkapan kuadratik dalam satu pemboleh ubah
Which of the following is a quadratic expression in one variable?

A $x^2 - 7x$

B $4 + 3x - 4x$

C $\frac{x^2}{3} + \frac{2x}{5} - \frac{3}{x}$

D $5x^2 - 4x + 8 = 0$

2. Tentukan pintasan-y bagi fungsi kuadratik $f(x) = -7x^2 + 21x + 16$.
Determine the y-intercept for the following quadratic function $f(x) = -7x^2 + 21x + 16$.

A 30

C 16

B 21

D 14

3. Berikut menunjukkan suatu situasi.
The following shows a situation.

Umur Betsy adalah 7 tahun kurang daripada umur Chong. Selepas 5 tahun, hasil darab umur Betsy dan Chong ialah 980 tahun.
Betsy's age is 7 years less than Chong's age. After 5 years, the product of their ages is 980 years.

Pilih satu persamaan kuadratik yang mewakili situasi di atas.
Choose a quadratic equation which represents the above situation.

A $x^2 + 3x - 990 = 0$

C $x^2 - 2x - 980 = 0$

B $x^2 - 7x - 980 = 0$

D $x^2 - 7x - 990 = 0$

4. Diberi/ *Given* $3x^2 + 7x - 6 = 0$.

Antara berikut, yang manakah merupakan punca bagi persamaan kuadratik di atas?
Which of the following is the root of the above quadratic equation?

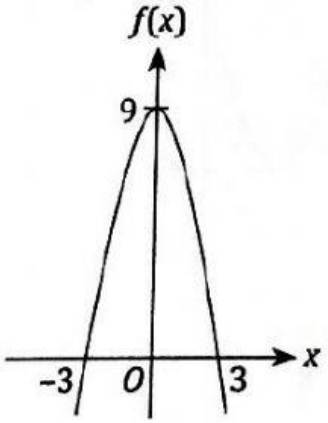
A -3

C O

B- 2

D 1

5. Rajah berikut menunjukkan sebuah graf bagi suatu fungsi kuadratik.
The following diagram shows the graph of a quadratic function.



Antara berikut, yang manakah ialah fungsikuadratik bagi graf tersebut?
Which of following is the quadratic function for the graph?

A $f(x) = x^2 + 9$

C $f(x) = -x^2 + 3$

B $f(x) = x^2 + 3$

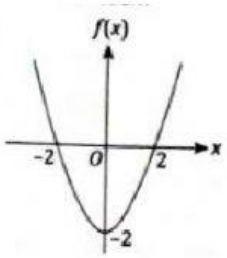
D $f(x) = -x^2 + 9$

6. Diberi/ *Given* $f(x) = x^2 - 5x + 4$.

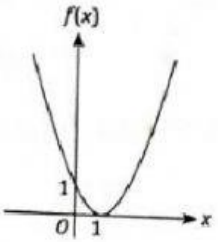
Antara yang berikut, yang manakah mewakili fungsi kuadratik di atas?

Which of the following represents the above quadratic function?

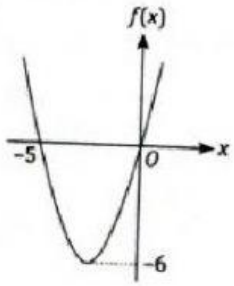
A



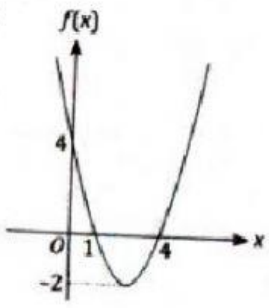
B



C



D



7. Antara persamaan kuadratik berikut, yang manakah mempunyai punca-punca-3 dan 2?

Which of the following quadratic equations has roots of -3 and 2?

A $x^2+x-6=0$

B $x^2-x-6=0$

C $2x^2+x-12=0$

D $2x^2-x-12=0$

8. Selesaikan / *Solve* $2x^2 + x - 15 = 0$

A $x = \frac{2}{5}$ atau/ *or* 3

B $x = \frac{5}{2}$ atau/ *or* -3

C $x = \frac{2}{3}$ atau/ *or* 5

D $x = -\frac{2}{3}$ atau/ *or* 5

9. Diberi fungsi kuadratik $f(x) = 2x^2 + 3x + c$ melalui titik(1, 3). Cari nilai c.
Given quadratic function $f(x) = 2x^2 + 3x + c$ passes through point(1, 3). Find the value of c.

A -8

B – 2

C 2

D 8

10. Selesaikan/ *Solve*

$$(2x + 1)(x-1) = x^2 - 2x + 5$$

A x = -5 atau/ *or* 3

B x = -3 atau/ *or* 5

C x = -3 atau/ *or* 2

D x = -2 atau/ *or* 3