

Zon RST Bab 3

Aras Rendah **R**

- Selesaikan sistem persamaan linear berikut.
Solve the following system of linear equations.

$$x + y + z = 6$$

$$2x - y + z = 3$$

$$x + 2y - z = 2$$
- Diberi sistem persamaan:
Given a system of linear equations:

$$a + b - c = 4$$

$$2a + 3b + c = 10$$

$$a - b + 2c = 1$$
Cari nilai a , b dan c .
Find the values of a , b and c .
- Selesaikan sistem persamaan linear berikut.
Solve the following system of linear equations.

$$2p + q - r = 5$$

$$p - q + 2r = 3$$

$$3p + 2q + r = 10$$
- Tiga buah buku, dua batang pen, dan satu gunting berharga RM17. Dua buah buku, tiga batang pen, dan dua gunting berharga RM19. Sebuah buku, empat batang pen, dan tiga gunting berharga RM19. Cari harga setiap item.
Three books, two pens, and a scissor cost RM17. Two books, three pens, and two scissors cost RM19. A book, four pens, and three scissors cost RM19. Find the price of each item.
- Selesaikan sistem persamaan linear berikut.
Solve the following system of linear equations.

$$2x + y - z = 3$$

$$x - y + 2z = 7$$

$$3x + 2y + z = 12$$

Aras Sederhana **S**

- Selesaikan persamaan serentak berikut:
Solve the following simultaneous equations:

$$x + 2y = 5$$

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

7. Selesaikan persamaan serentak berikut:

Solve the following simultaneous equations:

$$(2x - y)^2 + 3xy = 28$$

$$x + y = 4$$

8. Garis $x - 2y = 2$ bertemu dengan lengkok $x^2 + xy = 20$ pada titik P dan Q . Cari koordinat bagi titik P dan Q .

The line $x - 2y = 2$ meets the curve $x^2 + xy = 20$ at the points P and Q . Find the coordinates of point P and Q .

Aras Tinggi

9. Selesaikan persamaan serentak berikut:

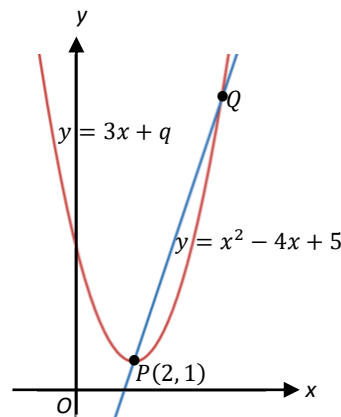
Solve the following simultaneous equations:

$$2x - 3y = 1$$

$$x^2 + 2xy - y^2 = 7$$

10. Rajah di bawah menunjukkan suatu lengkung $y = x^2 - 4x + 5$ dan garis lurus $y = 3x + q$ yang bersilang pada titik P dan titik Q .

The diagram below shows a curve $y = x^2 - 4x + 5$ and a straight line $y = 3x + q$ that intersect at point P and point Q .



Cari nilai q dan koordinat titik Q .

Find the value of q and the coordinates of point Q .

Jawapan

1. $x = 1, y = 2, z = 3$
2. $a = \frac{22}{9}, b = \frac{5}{3}, c = -\frac{1}{9}$
3. $p = \frac{8}{3}, q = \frac{5}{9}, r = \frac{8}{9}$
4. Buku / *Book* = RM4, Pen / *Pen* = RM2, Gunting / *Scissor* = RM3
5. $x = \frac{12}{5}, y = 1, z = \frac{14}{5}$
6. $x = 3, y = 1$ dan / *and* $x = -1, y = 3$
7. $x = 1 + \sqrt{3}, y = 3 - \sqrt{3}$ dan / *and* $x = 1 - \sqrt{3}, y = 3 + \sqrt{3}$
8. $P(4, 1), Q\left(-\frac{10}{3}, -\frac{8}{3}\right)$
9. $x = 2, y = 1$ dan / *and* $x = -\frac{32}{17}, y = -\frac{27}{17}$
10. $q = -5, Q(5, 10)$