

Penyelesaian Lengkap

PRAKTIS 8

Bahagian A

- Objek 5 mempunyai banyak imej.
Banyak objek (10 dan 20) mempunyai imej yang sama.
Object 5 has many images. Many objects (10 and 20) have the same image.
Jawapan/Answer: D
- Objek b mempunyai banyak imej (q dan r).
Object b has many images (q and r).
Jawapan/Answer: B
- $f(x) = x^2$
 $f(a) = a^2 = 64$
 $a = 8$
Jawapan/Answer: A
- $b \times 4 = 28$
 $b = 7$
Jawapan/Answer: C
- Objek 2 mempunyai dua imej (8 dan 10).
Object 2 has two images (8 and 10).
Jawapan/Answer: D
- Suatu garis yang selari dengan paksi- y memotong graf pada satu titik sahaja.
A line parallel to y-axis cuts the graph at one point only.
Jawapan/Answer: A
- Julat ialah set bagi imej.
Range is the set of images.
Jawapan/Answer: A
- Domain ialah set bagi objek.
Domain is the set of objects.
Jawapan/Answer: B
- $x = -4, y = 3(-4)^2 - 2$
 $= 3(16) - 2$
 $= 48 - 2$
 $= 46$
Jawapan/Answer: C
- $x = -2, y = (-2)^2 - 3(-2) + 5$
 $= 4 + 6 + 5$
 $= 15$
Jawapan/Answer: D
- $x = -3, y = 15 - (-3)^3$
 $= 15 - (-27)$
 $= 42$
Jawapan/Answer: D
- $(-2, m): x = -2, y = m$
 $y = 2x^3 - 15$
 $m = 2(-2)^3 - 15$
 $= 2(-8) - 15$

$$= -16 - 15$$
$$= -31$$

Jawapan/Answer: A

13 $(-3, p): x = -3, y = p$
 $y = 3x^2 - 5$
 $p = 3(-3)^2 - 5$
 $= 3(9) - 5$
 $= 27 - 5$
 $= 22$

Jawapan/Answer: B

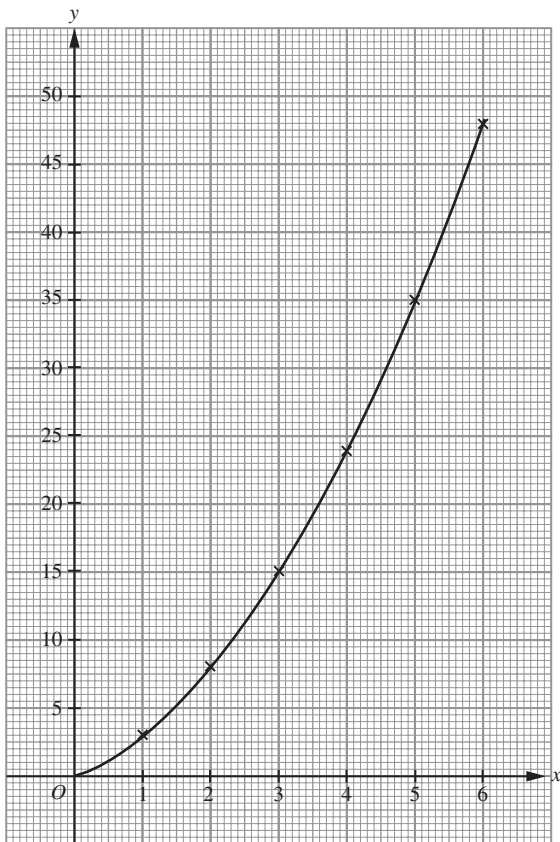
Bahagian B

- (a) Hubungan banyak kepada satu
Many-to-one relation
(b) Hubungan satu kepada satu
One-to-one relation
(c) Hubungan banyak kepada banyak
Many-to-many relation
(d) Hubungan satu kepada banyak
One-to-many relation
- (a) ✓ (b) ✗ (c) ✓ (d) ✓
- (a) (i) $x = 5, a = 5^2 - 3$
 $= 25 - 3$
 $= 22$
(ii) $f(x) = 61, x = b$
 $b^2 - 3 = 61$
 $b^2 = 64 = 8^2$
 $b = 8$
(b) (i) BENAR/TRUE
(ii) PALSU/FALSE
- (a) (i) $L = \pi r^2$
(ii) (a) L
(b) r
(b) Lilitan bulatan
Circumference of circle
 $= 2 \times \frac{22}{7} \times 7$
 $= 44 \text{ cm}$

Bahagian C

- (a) (i) $\{-9, -6, 6, 9\}$
(ii) $\{36, 81\}$
(iii) $\{(-9, 81), (-6, 36), (6, 36), (9, 81)\}$
(iv) Hubungan banyak kepada satu
Many-to-one relation
(b) (i) $x = 4, L = 4^2 + 2(4)$
 $= 16 + 8$
 $= 24$

(ii)



(c) $(6, m): x = 6, y = m$
 $y = 3x - x^2 + 4$
 $m = 3(6) - (6)^2 + 4$
 $= 18 - 36 + 4$
 $= -14$

2 (a) (i) Tahun/Year 2019

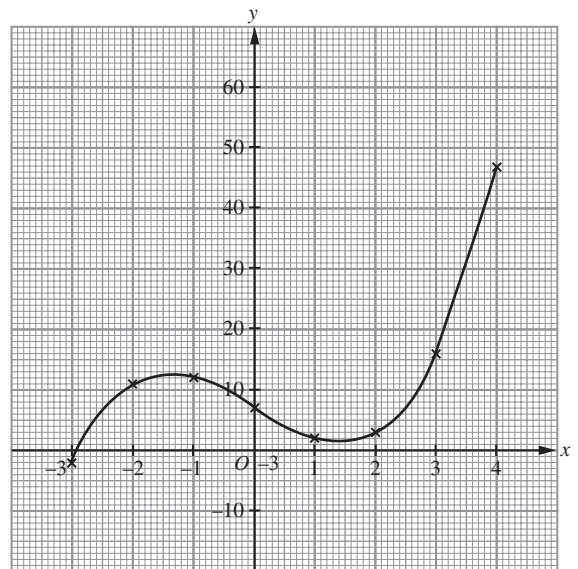
(ii) Faedah diterima pada tahun 2020
Interest received in the year 2020
 $= \text{RM}12\,000 \times \frac{10}{100}$
 $= \text{RM}1\,200$

(iii) Jumlah simpanan
Total savings

$$= \text{RM}6\,000 + \frac{10}{100} \times \text{RM}6\,000$$
$$= \text{RM}6\,000 + \text{RM}600$$
$$= \text{RM}6\,600$$

(b) (i) $x = 3, y = x^3 - 6x + 7$
 $= 3^3 - 6(3) + 7$
 $= 27 - 18 + 7$
 $= 16$

(ii)



(c) (i) Bukan fungsi/Not a function

(ii) Objek 16 mempunyai dua imej (4 dan -4)
Object 16 has two images (4 and -4)
Objek 49 mempunyai dua imej (7 dan -7)
Object 49 has two images (7 and -7)