

## Chapter 1 Rational Numbers

- 1 Bulatkan integer.  
Circle the integer.

[4 markah/4 marks]

Jawapan/Answer:

|      |     |      |               |
|------|-----|------|---------------|
| -2.4 | 0.4 | -7   | $\frac{2}{5}$ |
| 0    | 59  | 0.25 | -61           |

- 2 Isikan nombor yang sesuai ke dalam .  
Fill in the suitable number into the .

[3 markah/3 marks]

Jawapan/Answer:

(a)  $4(9 + 4) = 4 \times \boxed{\phantom{00}} + 4 \times 4$

(b)  $6 \times 7 \times 8 = 8 \times \boxed{\phantom{00}} \times 7$

(c)  $5 \times 399 = 5 \times (\boxed{\phantom{00}} - 1)$

- 3 Tentukan sama ada nombor yang berikut ialah nombor nisbah atau bukan.  
Determine whether each of the following numbers is a ratio number.

[4 markah/4 marks]

Jawapan/Answer:

|     | Nombor<br>Number | Ya/Bukan<br>Yes/No |
|-----|------------------|--------------------|
| (a) | $3\frac{1}{8}$   |                    |
| (b) | 0.03             |                    |
| (c) | 1.414213562...   |                    |
| (d) | -9               |                    |

- 4 Susun perpuluhan yang berikut mengikut tertib menaik.  
Arrange the following decimals in ascending order.

1.125, -3.905, 2.514, -1.008, 2.367

[2 markah/2 marks]

- 5 Isikan simbol '<' atau '>' ke dalam .

Fill in the  with the symbol '<' or '>'.

[5 markah/5 marks]

Jawapan/Answer:

(a)  $12 \boxed{\phantom{00}} 21$  (c)  $-6 \boxed{\phantom{00}} 9$

(b)  $\frac{1}{4} \boxed{\phantom{00}} \frac{1}{8}$  (d)  $-0.7 \boxed{\phantom{00}} -0.07$

(e)  $-\frac{3}{5} \boxed{\phantom{00}} -\frac{3}{4}$

- 6 Tandakan (✓) untuk pernyataan yang betul dan (✗) pada pernyataan yang salah.  
Mark (✓) for the correct statement and (✗) for the incorrect statement.

[5 markah/5 marks]

Jawapan/Answer:

(a)  $a \times b = b \times a$  ialah Hukum Kalis Tukar Tertib. ☐  
 $a \times b = b \times a$  is Commutative Law.

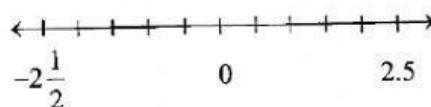
(b)  $a \times (b - c) = a \times b - a \times c$  ialah Hukum Kalis Agihan. ☐  
 $a \times (b - c) = a \times b - a \times c$  is Distributive Law.

(c)  $a + b = b + a$  ialah Hukum Kalis Sekutuan. ☐  
 $a + b = b + a$  is Associative Law.

(d)  $a \times 0 = 0$  ialah Hukum Identi. ☐  
 $a \times 0 = 0$  is Identity Law.

(e)  $(a \times b) \times c = a \times b \times c$  ialah Hukum Kalis Agihan. ☐  
 $(a \times b) \times c = a \times b \times c$  is Distributive Law.

- 7 Rajah di bawah menunjukkan suatu garis nombor.  
The diagram shows a number line.



Nyatakan integer positif dan integer negatif yang terdapat pada garis nombor itu.

State the positive integer and the negative integer on the number line.

[2 markah/2 marks]

Jawapan/Answer:

|                                     |  |
|-------------------------------------|--|
| Integer positif<br>Positive integer |  |
| Integer negatif<br>Negative integer |  |

## Chapter 2 Factors and Multiples

- 1 Tentukan sama ada nombor yang berikut ialah faktor bagi 39 atau bukan.  
Determine whether each of the following numbers is a factor of 39.

[3 markah/3 marks]

Jawapan/Answer:

|     | Nombor<br>Number | Ya/Bukan<br>Yes/No |
|-----|------------------|--------------------|
| (a) | 3                |                    |
| (b) | 6                |                    |
| (c) | 13               |                    |

- 2 Lengkapkan langkah-langkah di bawah untuk mencari FSTB bagi 60, 72 dan 108 dengan mengisi petak-petak kosong dengan nombor yang sesuai.  
Complete the steps to find the FSTB for 60, 72 and 108 by filling the empty squares with the appropriate numbers.

[4 markah/4 marks]

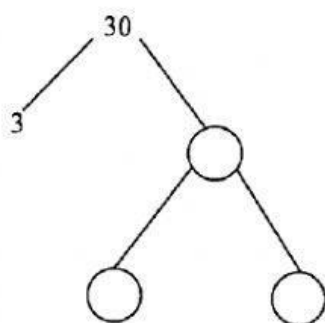
Jawapan/Answer:

|                      |    |   |                      |   |                      |
|----------------------|----|---|----------------------|---|----------------------|
| <input type="text"/> | 60 | , | 72                   | , | 108                  |
| 2                    | 30 | , | 36                   | , | 54                   |
| <input type="text"/> | 15 | , | <input type="text"/> | , | 27                   |
|                      | 5  | , | 6                    | , | <input type="text"/> |

- 3 (a) Lengkapkan pokok faktor berikut.  
Complete the following factor tree.

[2 markah/2 marks]

Jawapan/Answer:



- 4 (a) Bulatkan semua faktor perdana bagi 66.  
Circle all the prime factors of 66.

[3 markah/3 marks]

Jawapan/Answer:

|    |    |    |    |
|----|----|----|----|
| 1  | 2  | 3  | 4  |
| 5  | 6  | 7  | 9  |
| 11 | 22 | 33 | 66 |

- 5 Tandakan (✓) bagi nombor perdana.  
Mark (✓) for the prime numbers.

[4 markah/ marks]

Jawapan/ Answer:

|     |    |  |
|-----|----|--|
| (a) | 31 |  |
| (b) | 57 |  |
| (c) | 69 |  |
| (d) | 83 |  |
| (e) | 89 |  |
| (f) | 97 |  |

- 6 Padankan pasangan nombor berikut dengan faktor sepunya terbesar yang betul.  
Match the following pair of numbers with their correct highest common factor.

Jawapan/ Answer:

[3 markah/ marks]

|                            |     |    |
|----------------------------|-----|----|
| 32 dan 68<br>32 and 68     | • • | 2  |
| 12 dan 74<br>12 and 74     | • • | 4  |
| 48 dan 56<br>48 and 56     | • • | 8  |
| 104 dan 143<br>104 and 143 | • • | 13 |

- 7 Tandakan (✓) pada pernyataan yang betul.  
Tick (✓) for the correct statement.

[4 markah/ marks]

Jawapan/ Answer:

|     |                                                                                       |  |
|-----|---------------------------------------------------------------------------------------|--|
| (a) | 54 ialah gandaan sepunya bagi 6 dan 9<br>54 is a common multiple of 6 and 9           |  |
| (b) | 80 ialah gandaan sepunya bagi 5 dan 11<br>80 is a common multiple of 5 and 11         |  |
| (c) | 144 ialah gandaan sepunya bagi 2, 3 dan 12<br>144 is a common multiple of 2, 3 and 12 |  |
| (d) | 122 ialah gandaan sepunya bagi 5, 8 dan 12<br>122 is a common multiple of 5, 8 and 12 |  |

- 8 Tandakan (✓) pada pernyataan yang betul.  
Tick (✓) for the correct statement.

[4 markah/ marks]

Jawapan/ Answer:

|     |                                                                                           |  |
|-----|-------------------------------------------------------------------------------------------|--|
| (a) | Nombor perdana yang paling kecil ialah 1<br>The lowest prime number is 1                  |  |
| (b) | 2 ialah nombor perdana<br>2 is a prime number                                             |  |
| (c) | Semua nombor perdana ialah nombor ganjil<br>All prime numbers are odd number              |  |
| (d) | Terdapat 4 nombor perdana antara 0 hingga 10<br>There are 4 prime numbers between 0 to 10 |  |

### Chapter 3

#### Squares, Square Roots, Cubes and Cube Roots

- 1 (a) Tandakan (✓) untuk jawapan yang betul dan (✗) pada jawapan yang salah.  
Mark (✓) for the correct answer and (✗) for the incorrect answer.

[3 markah/3 marks]

Jawapan/Answer:

(i)  $5^2 = 5 \times 2$  ☐

(ii)  $5^2 = 5 \times 5$  ☐

(iii)  $5^2 = 5 + 5$  ☐

- (b) Bulatkan kuasa dua sempurna.  
Circle the perfect square.

[1 markah/1 mark]

Jawapan/Answer:

|     |    |      |   |   |     |
|-----|----|------|---|---|-----|
| 122 | 66 | -169 | 8 | 7 | 100 |
|-----|----|------|---|---|-----|

- 2 Padankan jawapan yang betul.  
Match the correct answers.

[4 markah/4 marks]

Jawapan/Answer:

|                    |     |
|--------------------|-----|
| (a) $(-5)^2$       | 4   |
| (b) $\sqrt[3]{81}$ | 9   |
| (c) $4^3$          | 64  |
| (d) $\sqrt[3]{64}$ | 25  |
|                    | -25 |

- 3 Tandakan (✓) untuk pernyataan yang betul dan (✗) pada pernyataan yang salah.  
Mark (✓) for the correct statement and (✗) for the incorrect statement.

[3 markah/3 marks]

Jawapan/Answer:

- (a) 27 ialah kuasa tiga sempurna.  
27 is a perfect cube. ☐
- (b) -216 ialah kuasa tiga bagi 6.  
-216 is the cube of 6. ☐
- (c) 0.1 ialah punca kuasa tiga bagi 0.01.  
0.1 is the cube root of 0.01. ☐

- 4 Tandakan (✓) bagi pernyataan yang betul dan (✗) bagi pernyataan yang salah.  
Mark (✓) for the correct statement and (✗) for the incorrect statement.

[3 markah/3 marks]

Jawapan/Answer:

(a)  $3^2 < 3.8^2 < 4^2$  ( )

(b)  $20^3 < 20.2^3 < 21^3$  ( )

(c)  $(-7)^3 < (-7.2)^3 < (-8)^3$  ( )

- 5 Tentukan sama ada nombor berikut ialah kuasa dua sempurna atau bukan.

Determine whether the following number is a perfect square or not.

Jawapan/ Answer: [4 markah/ marks]

|     |     |  |
|-----|-----|--|
| (a) | 49  |  |
| (b) | 100 |  |
| (c) | 343 |  |
| (d) | 255 |  |

- 6 Padankan setiap yang berikut dengan nilai yang betul.  
Match each of the following with its value correctly.

[4 markah/ marks]

Jawapan/ Answer:

|                 |   |     |
|-----------------|---|-----|
| $\sqrt{144}$    | • | -25 |
| $(-5)^2$        | • | -4  |
| $\sqrt{4^2}$    | • | 4   |
| $\sqrt[3]{-64}$ | • | 12  |
|                 | • | 25  |

- 7 Mark (✓) for the correct one and (✗) for the wrong one.

Jawapan/ Answer: [2 markah/ marks]

|      |                            |  |
|------|----------------------------|--|
| (i)  | $\sqrt{8^2} = 8^2$         |  |
| (ii) | $64 = \sqrt{64 \times 64}$ |  |

## Chapter 4 Ratios, Rates and Proportions

- 1 Padankan pasangan nisbah yang setara.  
Match each pair of equivalent ratios.

[3 markah/3 marks]

Jawapan/Answer:

|                 |                               |
|-----------------|-------------------------------|
| (a) $9 : 33$    | $\frac{1}{2} : \frac{11}{16}$ |
| (b) $12 : 16$   | $2 : 3$                       |
| (c) $0.4 : 0.6$ | $6 : 4$                       |
|                 | $3 : 4$                       |
|                 | $\frac{1}{2} : \frac{2}{5}$   |

- 2 Nisbah yang manakah setara dengan  $8 : 15$ ?  
Tandakan (✓) untuk jawapan yang betul dan (✗) pada jawapan yang salah.

Which of the ratios is equivalent to  $8 : 15$ ?  
Mark (✓) for the correct answer and (✗) for the incorrect answer.

[3 markah/3 marks]

Jawapan/Answer:

|                                  |                          |
|----------------------------------|--------------------------|
| (a) $\frac{1}{2} : \frac{1}{3}$  | <input type="checkbox"/> |
| (b) $2 : 3\frac{3}{4}$           | <input type="checkbox"/> |
| (c) $\frac{4}{3} : 1\frac{2}{5}$ | <input type="checkbox"/> |

- 3 Bandingkan nisbah berikut menggunakan '<', '>' atau '='.  
Compare the following ratios using '<', '>' or '='.

[3 markah/3 marks]

Jawapan/Answer:

|              |                          |           |
|--------------|--------------------------|-----------|
| (a) $4 : 10$ | <input type="checkbox"/> | $2 : 5$   |
| (b) $1 : 2$  | <input type="checkbox"/> | $1.2 : 2$ |
| (c) $3 : 2$  | <input type="checkbox"/> | $1 : 2$   |

- 4 Diberi bahawa  $p : q = 3 : 4$  dan  $q : r = 2 : 1$ .  
Pada ruang jawapan, tandakan (✓) bagi pernyataan yang betul dan (✗) bagi pernyataan yang tidak betul.

It is given that  $p : q = 3 : 4$  and  $q : r = 2 : 1$ .  
In the answer space, mark (✓) for the correct statement and (✗) for the incorrect statement.

[3 markah/3 marks]

Jawapan/Answer:

- (a)  $q : p = 4 : 3$  ( )  
(b)  $p : r = 3 : 1$  ( )  
(c)  $p : q : r = 3 : 4 : 2$  ( )

- 5 Bulatkan nisbah yang dalam sebutan terendah.  
Circle the ratio which is in the lowest terms.

[4 markah/ marks]

Jawapan/ Answer:

|              |              |              |
|--------------|--------------|--------------|
| 3 : 49 : 13  | 24 : 12 : 6  | 25 : 64 : 11 |
| 12 : 15 : 18 | 7 : 9 : 21   | 28 : 24 : 32 |
| 9 : 21 : 15  | 15 : 18 : 20 | 45 : 10 : 35 |

- 6 Tandakan (✓) bagi nisbah setara dan (✗) bagi nisbah tidak setara.  
Mark (✓) for the equivalent ratio and (✗) for the inequivalent ratio.

Jawapan/ Answer: [4 markah/ marks]

|     |              |             |                          |
|-----|--------------|-------------|--------------------------|
| (a) | 2 : 6 : 10   | 3 : 9 : 15  | <input type="checkbox"/> |
| (b) | 14 : 16 : 18 | 8 : 10 : 12 | <input type="checkbox"/> |
| (c) | 81 : 49 : 36 | 9 : 7 : 6   | <input type="checkbox"/> |
| (d) | 32 : 56 : 64 | 8 : 14 : 16 | <input type="checkbox"/> |

- 7 Padankan nisbah kepada nisbah setaranya.  
Match the ratio to its equivalent ratio.

[4 markah/ marks]

Jawapan/ Answer:

|         |   |   |          |
|---------|---|---|----------|
| 48 : 64 | • | • | 72 : 126 |
| 4 : 7   | • | • | 51 : 63  |
| 35 : 45 | • | • | 6 : 8    |
| 34 : 42 | • | • | 14 : 18  |

## Chapter 5 Algebraic Expressions

- 1 Determine whether the variable  $x$  in each of the following situations has a fixed value or a varied value. Circle the answer.

Jawapan/Answer: [3 markah/3 marks]

- (a) Ganesh menggunakan masa  $x$  minit untuk berlari 1 km.  
Ganesh spends  $x$  minutes to run 1 km.

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Nilai yang tetap<br>A fixed value | Nilai yang berubah<br>A varied value |
|-----------------------------------|--------------------------------------|

- (b) Beza umur Ali dengan umur Azli sekarang ialah  $x$  tahun.  
The age difference between Ali and Azli now is  $x$  years.

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Nilai yang tetap<br>A fixed value | Nilai yang berubah<br>A varied value |
|-----------------------------------|--------------------------------------|

- (c) Bil air bulanan rumah Puan Hayati ialah RM $x$ .  
The monthly water bill of Puan Hayati's household is RM $x$ .

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Nilai yang tetap<br>A fixed value | Nilai yang berubah<br>A varied value |
|-----------------------------------|--------------------------------------|

- 2 (a) Circle the algebraic expression which has two terms.

Jawapan/Answer: [2 markah/2 marks]

|          |               |       |           |
|----------|---------------|-------|-----------|
| $7x + 3$ | $5xy - x + 2$ | $4xy$ | $8x - 6y$ |
|----------|---------------|-------|-----------|

- (b) Among the following pairs of algebraic terms, which are like terms? Mark (✓) in the ☐.

Jawapan/Answer: [1 markah/1 mark]

|                          |                          |                                 |
|--------------------------|--------------------------|---------------------------------|
| $4m^2n$ , $-6nm^2$       | $0.5uv$ , $9uvw$         | $\frac{p^2q^2r}{4}$ , $rp^2q^3$ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>        |

- 3 Circle the algebraic expression which has three terms.

Jawapan/Answer: [3 markah/3 marks]

|                |                         |               |
|----------------|-------------------------|---------------|
| $3abc$         | $\frac{1}{2}m + 2n - 5$ | $5bc - 8b$    |
| $5b + c - 6$   | $3x + 4y + 6x - 4$      |               |
| $2x - 16y + 8$ | $11x - 20h$             | $\frac{m}{7}$ |

- 4 Mark (✓) for the like terms and (✗) for the unlike terms.

Jawapan/Answer: [4 markah/4 marks]

- (a)  $5n^2$  ,  $2n$  ☐
- (b)  $1.6pr$  ,  $-rp$  ☐
- (c)  $-\frac{u}{8}$  ,  $11u$  ☐
- (d)  $2p^2q$  ,  $\frac{1}{3}pq^2$  ☐

- 5 Circle all the algebraic terms in one variable.

Jawapan/ Answer: [4 markah/ marks]

|           |         |                  |                |
|-----------|---------|------------------|----------------|
| $0.3g^2h$ | $20pq$  | $\frac{13}{15}n$ | $\frac{m}{12}$ |
| $-9rs$    | $18h^2$ | $-18t$           | $36x$          |

- 6 Mark (✓) for the like terms and (✗) for the unlike terms.

Jawapan/ Answer: [4 markah/ marks]

|     |           |                          |
|-----|-----------|--------------------------|
| (a) | $-5x, 5y$ | <input type="checkbox"/> |
| (b) | $2r, 4r$  | <input type="checkbox"/> |
| (c) | $9a, -3a$ | <input type="checkbox"/> |
| (d) | $24p, 6q$ | <input type="checkbox"/> |

- 7 Circle all the like terms for  $5r^2s$ .

[3 markah/3 marks]

|                                                                             |
|-----------------------------------------------------------------------------|
| $\frac{r^2s}{3}$ , $5rs$ , $0.4r^2s$ , $\frac{2}{r^2s}$ , $-sr^2$ , $3rs^2$ |
|-----------------------------------------------------------------------------|

- 8 Write ( T ) for the variable with a fixed value and ( B ) for the variable with a varied value in the following situations.

- (i) The profit earned by a shop in each month.

☐

- (ii) The number of students who participated in a quiz.

☐

- (iii) The speed of a moving car.

☐

[3 markah/3 marks]

## Chapter 6 Linear Equations

- 1 Determine whether each the following is a linear equation in one variable.

[3 markah/3 marks]

Jawapan/Answer:

|     | Persamaan<br>Equation     | Ya/Bukan<br>Yes/No |
|-----|---------------------------|--------------------|
| (a) | $x + 2y = 50$             |                    |
| (b) | $p^2 - 18 = 74$           |                    |
| (c) | $\frac{4}{5}h + 40 = 120$ |                    |

- 2 Mark (✓) for the linear equations in one variable and (✗) for not the linear equations in one variable.

[5 markah/5 marks]

Jawapan/Answer:

- (a)  $5x + 4y = 25$  ( )  
 (b)  $b - 6 = 3b + 9$  ( )  
 (c)  $\frac{y}{4} - 1 = 0$  ( )  
 (d)  $r^2 + 2 = r - 8$  ( )  
 (e)  $3(3 - y) = 7$  ( )

- 3 Match the condition of two straight lines that representing the simultaneous linear equations and the types of their solutions.

[3 markah/3 marks]

Jawapan/Answer:

|     |                           |                                                        |
|-----|---------------------------|--------------------------------------------------------|
| (a) | Selari<br>Parallel        | Penyelesaian<br>tak terhingga<br>Infinite<br>solutions |
| (b) | Bersilang<br>Intersecting | Tiada<br>penyelesaian<br>No solutions                  |
| (c) | Bertindih<br>Overlapping  | Penyelesaian<br>unik<br>Unique<br>solutions            |

- 4 Circle all the linear equations in one variable. [3 markah/3 marks]

Jawapan/Answer:

|                         |                     |                |
|-------------------------|---------------------|----------------|
| $\frac{1}{5}j - 3 = 6j$ | $c + 8d = 10$       | $x^2 + 4 = 32$ |
| $a + b = 7$             | $\frac{p-9}{2} = 5$ | $6 + m = 1$    |

- 4 Determine whether the following equations are linear or not. [4 markah/ marks]

Jawapan/ Answer:

|     |                       |  |
|-----|-----------------------|--|
| (a) | $c + 23 = 2$          |  |
| (b) | $\frac{2}{f} + 8 = g$ |  |
| (c) | $q - 8 = 31q$         |  |
| (d) | $x^2y - x = 25$       |  |

- 5 Mark (✓) for the linear equations in one variable and (✗) for not. [4 markah/ marks]

Jawapan/ Answer:

|     |                         |  |
|-----|-------------------------|--|
| (a) | $10 - 4g = g$           |  |
| (b) | $3e + 5f = 19$          |  |
| (c) | $\frac{y}{2} + 16 = 9y$ |  |
| (d) | $3n + y = 8$            |  |

- 6 Mark (✓) for the linear equations in two variables and (✗) for not. [4 markah/ marks]

Jawapan/ Answer:

|     |                        |  |
|-----|------------------------|--|
| (a) | $20 - h = 4h$          |  |
| (b) | $3r + 23 = 11s$        |  |
| (c) | $16g + h = 9$          |  |
| (d) | $\frac{p}{4} + 16 = q$ |  |

## Chapter 7 Linear Inequalities

- 1 Fill in each box with the symbol ' $>$ ' or ' $<$ '.

Jawapan/Answer:

[3 markah/3 marks]

(a)  $-13$    $-20$

(b)  $\sqrt{9}$    $3^2$

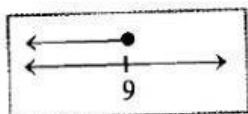
(c)  $-8$    $8.2$

- 2 Match each linear inequality with the correct number line.

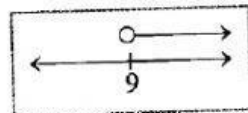
Jawapan/Answer:

[3 markah/3 marks]

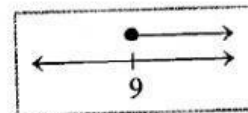
(a)  $x > 9$



(b)  $x \geq 9$



(c)  $x \leq 9$



- 3 Fill in the blanks with ' $>$ ' or ' $<$ '.

[3 markah/3 marks]

Jawapan/Answer:

(a) If  $a > b$ , then  $b$    $a$ .

(b) If  $a < b < c$ , then  $c$    $a$ .

(c) If  $a < b$ , then  $\frac{1}{a}$    $\frac{1}{b}$ .

- 4 Complete each of the following by using the symbol ' $>$ ' or ' $<$ '.

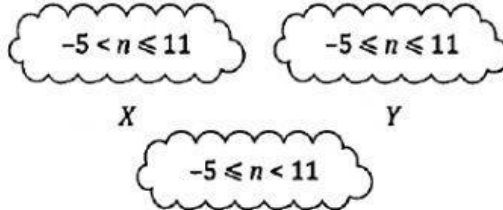
Jawapan/Answer:

(a) If  $y < 11$ , then  $-y$    $-11$ .

(b) If  $x > 4$ , then  $\frac{1}{x}$    $\frac{1}{4}$ .

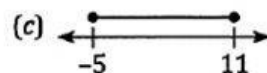
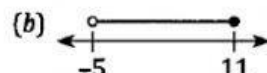
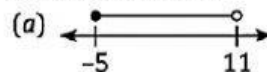
(c) If  $-2 < 5$ , then  $5$    $-2$ .

- 4 In the answer space, choose X, Y or Z which represents each of the number lines.



Jawapan/ Answer:

[3 markah/ marks]



- 5 Bulatkan ketaksamaan yang betul.

Circle the correct inequalities.

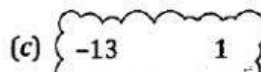
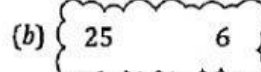
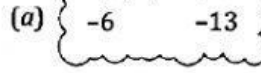
[5 markah/ marks]

Jawapan/ Answer:

|     |             |             |
|-----|-------------|-------------|
| (a) | $-21 > -9$  | $-21 < -9$  |
| (b) | $14 > 11$   | $14 < 11$   |
| (c) | $-5 > 5$    | $-5 < 5$    |
| (d) | $23 > 32$   | $23 < 32$   |
| (e) | $35 < 0.35$ | $35 > 0.35$ |

- 6 Fill in the boxes in the answer space by using the integers in the following diagram.

[3 markah/ marks]



Jawapan/ Answer:

(a)   $>$

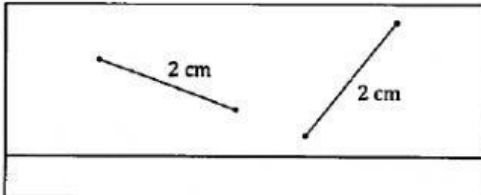
(b)   $<$

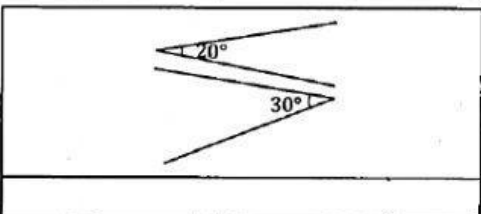
(c)   $<$

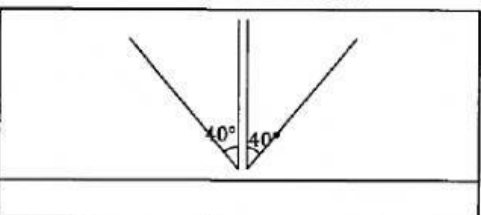
## Chapter 8 Lines and Angles

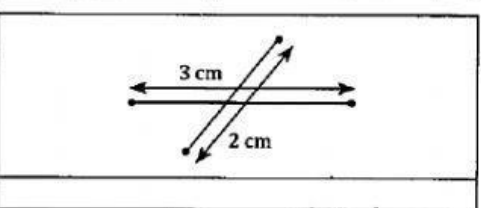
- 1 Determine whether the following lines and angles are congruent. [4 markah/ marks]

Jawapan/ Answer:

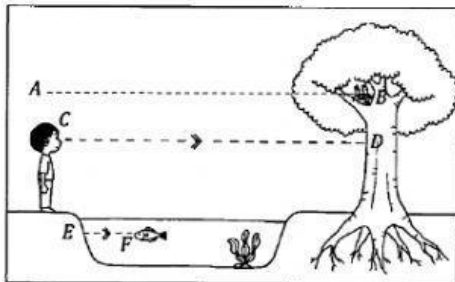
(a) 

(b) 

(c) 

(d) 

- 2 The following diagram shows a situation. Line AB, line CD and line EF are parallel.



State the following angles whether they are angle of elevation or ANGLE OF depression.

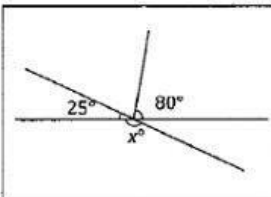
Jawapan/ Answer:

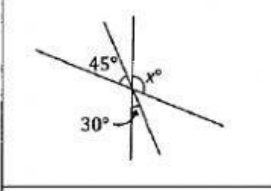
|     |              |  |
|-----|--------------|--|
| (a) | $\angle DCF$ |  |
| (b) | $\angle DCB$ |  |
| (c) | $\angle EFC$ |  |
| (d) | $\angle ABC$ |  |
| (e) | $\angle ABF$ |  |

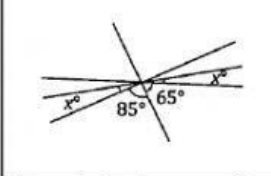
- 3 Match each of the following angles with the correct value.

Jawapan/ Answer:

[3 markah/ marks]

(a) 

(b) 

(c) 

• 15°

• 30°

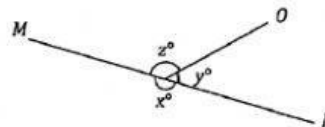
• 75°

• 80°

• 105°

• 155°

- 4 In the following diagram, MN is a straight line.



In the answer space, mark (✓) for the correct statement and (X) for the incorrect statement.

[4 markah/ marks]

Jawapan/ Answer:

|     |                                                                                                                             |  |
|-----|-----------------------------------------------------------------------------------------------------------------------------|--|
| (a) | $z^\circ$ adalah sudut refleks.<br>$z^\circ$ is a reflex angle.                                                             |  |
| (b) | $x^\circ + y^\circ + z^\circ$ adalah sudut putaran lengkap.<br>$x^\circ + y^\circ + z^\circ$ is an angle of one whole turn. |  |
| (c) | $y^\circ + z^\circ$ adalah sama dengan $x^\circ$ .<br>$y^\circ + z^\circ$ is equal to $x^\circ$ .                           |  |
| (d) | $x^\circ$ dan $z^\circ$ adalah sudut penggenap.<br>$x^\circ$ and $z^\circ$ are supplementary angles.                        |  |

- 5 Write 'True' for each of the correct matches and 'False' for each of the wrong matches. [4 marks]

|     | Type of angle                          | Pair of angles         | True / False |
|-----|----------------------------------------|------------------------|--------------|
| (a) | Sudut pelengkap<br>Complementary angle | $23^\circ, 67^\circ$   |              |
| (b) | Sudut penggenap<br>Supplementary angle | $108^\circ, 62^\circ$  |              |
| (c) | Sudut konjugat<br>Conjugate angle      | $235^\circ, 135^\circ$ |              |
| (d) | Sudut refleks<br>Reflex angle          | $78^\circ, 97^\circ$   |              |

## Chapter 9 Basic Polygons

1 Mark (✓) for the polygon and (×) for non-polygon. [3m]

| (a) | (b) | (c) |
|-----|-----|-----|
|     |     |     |

2 State the sides of the following polygons.

Jawapan/ Answer: [4 markah/ marks]

|     |                    |  |
|-----|--------------------|--|
| (a) | Heksagon/ Hexagon  |  |
| (b) | Heptagon/ Heptagon |  |
| (c) | Oktagon/ Octagon   |  |
| (d) | Dekagon/ Decagon   |  |

3 Match the following polygons with their correct number of diagonals.

Jawapan/ Answer: [4 markah/ marks]

|                             |   |   |   |
|-----------------------------|---|---|---|
| Sisi empat<br>Quadrilateral | • | • | 0 |
| Pentagon<br>Pentagon        | • | • | 9 |
| Heksagon<br>Hexagon         | • | • | 5 |
| Segi tiga<br>Triangle       | • | • | 2 |

4 State the following type of triangles. [4 markah/marks]

|                       |                      |
|-----------------------|----------------------|
| Right-angled triangle | Isosceles triangle   |
| Acute-angled triangle | Equilateral triangle |

Jawapan/ Answer:

|       |       |
|-------|-------|
| (a)   | (b)   |
| _____ | _____ |
| (c)   | (d)   |
| _____ | _____ |

5 Mark (✓) for the true statement and (×) for the false statement. [5m]

- (a) An isosceles triangle could be an obtuse-angled triangle. ( )
- (b) A right angled-triangle could be an isosceles triangle. ( )
- (c) A right-angled triangle may have axes of symmetry. ( )
- (d) A square and a rhombus are quadrilaterals and their diagonals intersect at right angles. ( )
- (e) A trapezium may have axes of symmetry. ( )

6 Match each of the quadrilaterals with their geometric properties. [5m]

|     |                                                                                                                              |
|-----|------------------------------------------------------------------------------------------------------------------------------|
| I   | Only one pair of opposite sides is parallel.                                                                                 |
| II  | All the sides are of equal length. The diagonals are perpendicular bisectors of each other. There are four axes of symmetry. |
| III | Two pairs of adjacent sides are of equal length. One pair of opposite angles is equal.                                       |
| IV  | All the sides are of equal length. The diagonals are perpendicular bisectors of each other. The opposite angles are equal.   |
| V   | The opposite sides are parallel and of equal length. There is no axis of symmetry.                                           |

|     | Quadrilaterals | Geometric properties |
|-----|----------------|----------------------|
| (a) | Rhombus        |                      |
| (b) | Parallelogram  |                      |
| (c) | Square         |                      |
| (d) | Trapezium      |                      |
| (e) | Kite           |                      |

7 Match each of the polygons with its name. [5m]

|     |               |
|-----|---------------|
| (a) | Octagon       |
| (b) | Hexagon       |
| (c) | Pentagon      |
| (d) | Quadrilateral |
| (e) | Heptagon      |