

Form 1 Chapter 1.1 Integers/Integer

1. (a) If +20 represents 20m above sea level, then -20 represents .
 Jika +20 mewakili 20m di atas aras laut, maka -20 mewakili .
- (b) If +90 represents a movement of 90m to the north, then -90 represents .
 Jika +90 mewakili pergerakan 90m ke arah utara, maka -90 mewakili .
- (c) If +800 represents RM800 being credited into a savings account, then RM800 being debited into a savings account is represented as .
 Jika +800 mewakili RM800 dikredit ke dalam suatu akaun simpanan, maka kerugian sebanyak RM1000 diwakili oleh .

2. State the following numbers using "+" or "-".
 Nyatakan nombor-nombor berikut dengan tanda "+" atau "-".
- (a) 80 less than zero (b) 76 more than zero
 Kurang 80 daripada sifar Lebih 76 daripada sifar

3. Represent the statements by using a positive number or a negative number.
 Wakilkan setiap pernyataan berikut dengan menggunakan nombor positif atau nombor negatif.

Statement/Pernyataan	Number/Nombor
(a) (i) 15cm above point P/di atas titik P (ii) 11cm below point P/di bawah titik P	
(a) (i) 30°C more than zero temperature lebih daripada suhu sifar (ii) 4°C less than zero temperature kurang daripada suhu sifar	
(b) (i) A deduction of RM60 in salary Pengurangan gaji RM60 (ii) A rise of RM110 in salary Kenaikan gaji RM110	
(c) (i) 60° clockwise/ikut arah jam (ii) 45° anticlockwise/ lawan arah jam	

4. List all integers
 Senaraikan semua integer
- (a) From/daripada -8 to/hingga 4
 (b) From/daripada -12 to/hingga -2

5. Determine whether each is an integer or not.
 Tentukan sama ada setiap nombor berikut ialah integer atau bukan.
- | | | | | | | |
|-----|-----|----|-----|----|---|----|
| -14 | 3.9 | 12 | -26 | 85 | 0 | -2 |
| | | | | | | |

6. -3, 2, 8, -1, $1\frac{1}{2}$, 3.2, 18, -24, 0.1, 100, -5.2, -9, $\frac{2}{7}$, -66, 49
- Based on the numbers, list the
 Berdasarkan nombor-nombor, senaraikan
- (a) Positive integers (b) Negative integers (c) Non-integers
 integer positif integer negatif bukan integer

7. Compare and arrange the following temperatures in order starting from the coldest.

Bandingkan dan susun suhu berikut mengikut tertib bermula daripada suhu tersejuk.

$$-3^{\circ}\text{C}, 2^{\circ}\text{C}, -4^{\circ}\text{C}, 1^{\circ}\text{C}, 4^{\circ}\text{C}$$

8. If 5, -3, 7, -9, 10, -13 are arranged in ascending order, find the integer lying in the third position.

Jika 5, -3, 7, -9, 10, -13 disusun mengikut tertib menaik, cari integer yang berada di kedudukan ketiga.

Chapter 1.2 Arithmetic Operations/ Operasi Aritmetik

1. Find the sum. / Cari hasil tambah

(a) $7 + (-6) + (-1) =$

(b) $-6 + (-2) + 9 =$

(c) $-2 + (-3) + (-5) =$

2. Solve. / Selesaikan

(a) $-13 + (-8) + (+1) =$

(b) $-28 + (-11) - (-12) =$

(c) $-40 - (-19) + (-33) =$

3. Evaluate/Nilaikan

(a) $-4 + 6 - (-8)$

(b) $336 + (-128) \div 4$

(c) $12 \times 5 - (-21)$

(d) $\frac{(-8) \times (-4)}{(-8) - (-4)}$

(e) $-18 + (-11) - (-10) - 15$

(f) $64 - (-2) \times 32 \div (-8)$

4. Fill in the blanks with suitable integers.

Isi tempat kosong dengan integer yang sesuai.

(a) 3, 1, -1, \square , \square , -7

(b) -8, -5, \square , \square , 4, \square

(c) -2, -4, -8, \square , \square , -64, \square

(d) 1, 3, \square , \square , \square , 243, 729

(e) -60, -48, \square , \square , \square , 0, \square

(f) 0, 1, 4, \square , 16, \square , \square , \square

5. Based on the list of numbers, find the value of $p + q$.

Berdasarkan senarai nombor, cari nilai $p + q$.

$$-22, -17, -12, p, -2, q, \dots$$

6. A company makes a profit of RM6200 in June. The company then incurs a loss of RM2500 and RM3900 in July and August respectively. Calculate the company's total profit or loss in these three months.

Sebuah syarikat mendapat keuntungan RM6200 pada bulan Jun. Syarikat itu mengalami kerugian RM2500 dan RM3900 masing-masing pada bulan Julai dan Ogos. Hitung jumlah keuntungan atau kerugian syarikat itu dalam tempoh tiga bulan.

7. The table shows the marks obtained by Zaid in a quiz competition for three rounds. Calculate the total marks Zaid obtained in the competition.

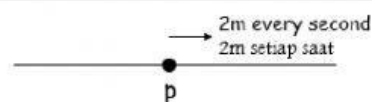
Jadual menunjukkan markah yang diperolehi Zaid dalam tiga pusingan bagi suatu pertandingan kuiz. Hitung jumlah markah Zaid dalam pertandingan itu.

Round/Pusingan	I	II	III
Marks/Markah	5	-2	3

8. A solution with a temperature of -2°C was taken out from a refrigerator. The temperature of the solution rose by 15°C after leaving it on a table for 20 minutes. Then, the solution was put back into the refrigerator and the temperature was found to drop by 18°C after 1 hour. Calculate the final temperature of the solution.

Suatu larutan yang suhunya -2°C dikeluarkan dari peti sejuk. Suhu larutan itu naik 15°C selepas dibiarkan 20 minit di atas meja. Kemudian, larutan itu dimasukkan semula ke dalam peti sejuk dan didapati suhunya turun 18°C selepas 1 jam. Hitung suhu akhir larutan itu.

9. A particle moves in the direction of the arrows. If the particle is at P now, find the distance of the particle from P 10 seconds before.



Suatu zarah bergerak dalam arah anak panah. Jika zarah itu berada di P sekarang, cari jarak zarah itu dari P pada 10 saat dahulu.

10. The water level in a leaking tank drops 25mm every minute. If the water level in the tank is 220cm now, calculate the water level, in cm, in the tank after 30 minutes.

Aras air dalam sebuah tangki yang bocor menyusut 25mm setiap minit. Jika aras air dalam tangki itu sekarang ialah 220cm, hitung aras air, dalam cm, dalam tangki itu selepas 30 minit.

11. The initial temperature of a cup of coffee is 78°C . The temperature of the coffee becomes 54°C after 6 minutes. If the drop in temperature of the coffee is the same every minute, find the temperature change of the coffee in one minute.

Suhu awal secawan kopi ialah 78°C . Suhu kopi itu menjadi 54°C selepas 6 minit. Jika penurunan suhu kopi itu adalah sama setiap minit, cari perubahan suhu kopi dalam seminit.

12. A helicopter descends 2km within x minutes. If the helicopter descends 100m every minute, calculate the value of x.

Sebuah helicopter turun 2km dalam masa x minit. Jika helicopter itu turun 100m setiap minit, hitung nilai x.

13. In a quiz, a participant is required to answer 5 questions. A score of 4 marks will be given for each correct answer and 2 marks will be deducted for each incorrect answer. If a participant answers 3 questions correctly, what is the total mark obtained?

Dalam suatu kuiz, seorang peserta dikehendaki menjawab 5 soalan. Setiap soalan yang dijawab dengan betul diberi 4 markah dan setiap soalan yang dijawab dengan salah ditolak 2 markah. Jika seorang peserta dapat menjawab 3 soalan dengan betul, berapakah jumlah markah yang diperoleh peserta itu?

Chapter 1.3 Fraction/Pecahan

1. Fill in the blank with the suitable fractions.

Isi tempat kosong dengan pecahan yang sesuai.

(a) $\frac{1}{3}, \frac{1}{6}, \square, 1\frac{1}{6}$

(b) $\frac{5}{8}, \frac{5}{24}, \frac{5}{72}, \square$

3. Complete using a suitable fraction.

Lengkapkan dengan pecahan yang sesuai

(a) $-\frac{1}{3} - \frac{5}{6} = \frac{1}{2} \times (\square)$

(b) $-\frac{2}{3} + \frac{5}{8} = \frac{1}{3} \div (\square)$

2. Solve/Selesaikan

(a) $\frac{2}{3} + \left(-\frac{1}{4}\right) - \frac{1}{6}$

(c) $\frac{1}{8} + \left(-\frac{3}{4}\right) \times 1\frac{1}{7}$

(e) $-\frac{3}{8} \times \left(-1\frac{1}{4}\right) \div \left(-\frac{15}{16}\right)$

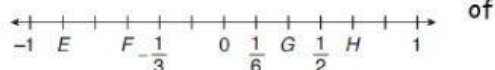
(b) $1\frac{1}{5} - \left(-2\frac{1}{2}\right) - \frac{1}{10}$

(d) $-\frac{6}{13} \div \frac{7}{13} - \left(-\frac{2}{7}\right)$

(f) $\left(-\frac{1}{3} \times \frac{6}{11}\right) - \left(\frac{1}{3} \div \frac{5}{6}\right)$

4. Based on the number line, find the value

Berdasarkan garis nombor, kira nilai



(a) $E + G$

(b) $F \times H$

5. The water level in a tank was $2\frac{2}{5}$ m at 4pm. The water level dropped by $\frac{1}{6}$ m every hour for 5 subsequent hours. When it was towards 12 midnight, the water level rose by $1\frac{2}{3}$ m. Calculate the water level at midnight.

Aras air di dalam sebuah tangka ialah $2\frac{2}{5}$ m pada pukul 4pm. Aras air menurun sebanyak $\frac{1}{6}$ m setiap jam bagi 5 jam berikutnya. Apabila menjelang 12 tengah malam, aras air naik sebanyak $1\frac{2}{3}$ m. Hitung aras air pada tengah malam.

6, Container A contains 60ml of water. $\frac{3}{8}$ of the water in container B is poured into container A. $\frac{5}{12}$ of the water in container A is then poured into an empty container C. If container C contains 45ml of water now, find the volume of water in container B.

Bekas A mengandungi 60ml air. $\frac{3}{8}$ daripada air di dalam bekas B dituangkan ke dalam bekas A. $\frac{5}{12}$ daripada air di dalam bekas A kemudian dituangkan ke dalam bekas C yang kosong. Jika bekas C mengandungi 45ml air sekarang, cari isi padu air di dalam bekas B.

7, Aini's watch is $5\frac{1}{2}$ minutes slower than the actual time whereas Rosman's watch is $8\frac{1}{4}$ minutes faster than the actual time. Calculate the time difference between Aini's watch and Rosman's watch.

Jam tangan Aini adalah $5\frac{1}{2}$ minit lebih lambat daripada waktu sebenar manakala jam tangan Rosman adalah $8\frac{1}{4}$ minit lebih cepat daripada waktu sebenar. Hitung beza masa antara jam tangan Aini dengan Rosman.

Chapter 1.4 Decimals/Perpuluhan

1. Complete the following patterns using suitable decimals.

Lengkapkan dengan perpuluhan yang sesuai.

(a) $-1.2, -0.9, \square, -0.3, \square$

(b) $-2.1, \square, -8.4, 16.8, \square$

2. Solve/Selesaikan

(a) $2.14 + 1.42 + (-4.21)$

(c) $-7.2 \div 0.6 + (-3.21)$

(e) $(-5.61 - 6.51) \times [3.2 - (-2.3)]$

(b) $3.8 - (-0.5) \times (-1.1)$

(d) $4.88 + \left(-\frac{26.6}{0.8}\right)$

(f) $-7.89 - 0.81 \div (10.56 - 11.46)$

3. Complete with suitable decimals.

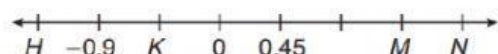
Lengkapkan dengan perpuluhan yang sesuai.

(a) $3.2 \times (-2.1) + 5.8 = 0.5 \times \square$

(b) $-5.12 - (-2.4) \div (-0.5) = 1.6 \times \square$

4. Based on the number line, calculate the value of

Berdasarkan garis nombor, cari nilai



(a) $K - N$

(b) $H \div M$

5. Raymond bought 63 oranges for RM34.65. The oranges were packed in small packets with 3 oranges in each packet. Calculate the price Raymond sold for each packet of oranges if he had
- Raymond membeli 63 biji oren dengan harga RM34.65. Oren itu dibungkus dalam bungkusan kecil yang mengandungi 3 biji sebungkus. Hitung harga setiap bungkus oren yang dijual Raymond jika dia
- (a) Incurred a loss of RM19.95/mengalami kerugian RM19.95
 (b) Made a profit of RM51.45/memperoleh keuntungan RM51.45 after he sold all the oranges./selepas jualan semua oren itu.
6. A fish is at 1.34m below sea level while a bird is at 4.32m above sea level. A turtle is below sea level at a vertical distance that is twice the distance between the fish and the bird. Calculate the vertical distance between the bird and the turtle.
- Seekor ikan berada 1.34m di bawah aras laut manakala seekor burung berada 4.32m di atas aras laut. Seekor penyu pula berada di bawah aras laut sejauh dua kali jarak menegak di antara ikan dengan burung. Hitung jarak menegak di antara burung dengan penyu.
7. The water temperature in beaker P is 10.8°C higher than room temperature while the water temperature in beaker Q is 5.55°C lower than room temperature. Calculate the difference between the temperature of water in the two beakers.
- Suhu air dalam bikar P adalah 10.8°C lebih tinggi daripada suhu bilik manakala suhu air dalam bikar Q adalah 5.55°C lebih rendah daripada suhu bilik. Hitung beza suhu air antara kedua-dua bikar itu.

Chapter 1.5 Rational Numbers/Nombor Nisbah

1. Evaluate/Nilaikan

(a) $-2.45 \times 4 + \frac{3}{5}$

(e) $2.5 + (-8) \div \frac{6}{5} \times 3.5$

(b) $3.6 \times (-3\frac{1}{2}) + (-7.25)$

(f) $16 \times \frac{3}{2} + 5.8 - (-0.03)$

(c) $(-2.14 + \frac{3}{4}) \times (-5)$

(g) $(\frac{1}{4} + 3.2 \times 2) - (5.4 - \frac{2}{3} \div 0.04)$

(d) $(-1\frac{4}{5} - 2.51) \div \frac{2}{8}$

(h) $-(27 \div 2\frac{1}{2}) \times (6 - 0.5) + (-7)$

2. For each of the following number pattern, complete it with suitable rational numbers.

Bagi setiap yang berikut, lengkapkan dengan nombor nisbah yang sesuai.

(a) $-2.4, -\frac{7}{2}, -4.6, \square, \square$

(b) $-\frac{1}{2}, -0.25, \square, -\frac{1}{16}, -0.03125$

3. Complete with suitable rational numbers.

Lengkapkan dengan nombor nisbah yang sesuai.

(a) $6.8 \div \frac{2}{5} - 4.62 = \square \times 0.01$

(b) $3.76 + \frac{3}{4} \times (-4.5) = \square \times 0.5$

4. Ishak, Jim and Sue went mountain-climbing together. At a certain instance, Ishak was at a level 1.45m higher than Jim while Sue was at level $2\frac{1}{3}$ m lower than Jim. Ishak, Jim dan Sue had climbed 1.25m, 0.5m and $3\frac{3}{4}$ m respectively. Find the positions of Jim dan Sue now with reference to the position of Ishak.

Ishak, Jim dan Sue pergi mendaki gunung bersama-sama. Pada suatu masa, Ishak berada pada aras 1.45m lebih tinggi daripada Jim manakala Sue berada pada aras $2\frac{1}{3}$ m lebih rendah daripada Jim. Ishak, Jim dan Sue telah menaiki 1.25m, 0.5m dan $3\frac{3}{4}$ m masing-masing. Cari kedudukan Jim dan Sue merujuk kedudukan Ishak sekarang.

5. A company made a profit of RM2.5 million per annum for the first three years. However, the company incurred a loss of $RM1\frac{1}{4}$ million per annum for the next two years. What was the average profit of the company acquiring each year for the five years?

Sebuah syarikat mendapat keuntungan sebanyak RM2.5 juta setahun bagi tiga tahun pertama. Namun, syarikat itu mengalami kerugian $RM1\frac{1}{4}$ juta setahun bagi dua tahun berikutnya. Berapakah purata keuntungan yang diperoleh syarikat itu pada setiap tahun bagi lima tahun tersebut.

6. The diagram shows the parking rate at a parking lot. Mr. Osman parked his car at the parking lot for $3\frac{1}{2}$ hours. He gives RM10 to the cashier. How much balance will Mr. Osman get from the cashier?

Rajah menunjukkan kadar bayaran letak kereta di suatu tempat letak

kereta. Encik Osman meletakkan kereta di sana selama $3\frac{1}{2}$ jam. Dia memberi RM10 kepada juruwang. Berapakah baki wang yang akan diperoleh oleh Encik Osman daripada juruwang tersebut.

Parking Rate/Kadar Bayaran Letak Kereta	
First Hour/Jam pertama	RM1.50
Every subsequent $\frac{1}{2}$ hour Setiap $\frac{1}{2}$ jam berikutnya	RM1.00

7. The depth of the water in a dam was 78.5m. After two months of drought, the water level dropped by 33.75m. The water level then rose by $26\frac{2}{5}$ m after incessant heavy rain for four months.

Calculate the depth of water in the dam now.

Kedalaman air di dalam sebuah empangan ialah 78.5m. Selepas dua bulan kemarau, aras air menurun sebanyak 33.75m. Kemudian, hujan lebat berterusan selama empat bulan dan aras air meningkat sebanyak $26\frac{2}{5}$ m. Hitung kedalaman air di dalam empangan itu sekarang.

8. Maria's mobile phone can be used to make calls continuously for 3 hours when it is fully charged for 2 hours. She fully charged her mobile phone at 8am on Monday. She spoke for $\frac{3}{25}$ hours at 12 noon and 0.18 hours at 4pm. Calculate how long, in minutes, she can still make calls on her mobile phone without charging it.

Telefon bimbit Maria boleh digunakan untuk 3 jam bercakap berterusan apabila telefon bimbit itu dicas sepenuhnya selama 2 jam. Maria cas sepenuhnya telefon bimbitnya pada hari Isnin pukul 8am. Dia bercakap selama $\frac{3}{25}$ jam pada pukul 12 tengah hari dan 0.18 jam pada pukul 4pm. Hitung jumlah masa, dalam minit, yang dia masih boleh bercakap dengan telefon bimbitnya tanpa mengecas.