Cari nilai x.

Find the value of x.

A 28°

B 70°

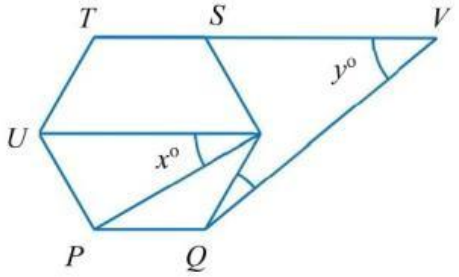
C 72°

D 74°

Trial 2023, SABK/SMKA (SET 2), Q7,

24 Rajah 3 menunjukkan sebuah heksagon sekata *PQRSTU* dan sebuah sisiempat *QRSV*. *TSV* adalah garis lurus

Diagram 3 shows a regular hexagon PQRSTU and a quadrilateral QRSV. TSV is a straight line



Cari nilai $x + y$.

Find the value of $x + y$

A 30

B 40

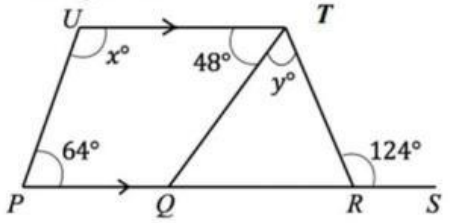
C 60

D 70

Trial 2023, JOHOR (SET 2), Q7,

25 Dalam rajah 1 di bawah, *PQRTU* adalah sebuah trapezium. *PQRS* ialah garis lurus.

In diagram 1 below, PQRTU is a trapezoid. PQRS is a straight line.



Cari nilai $x° + y°$.

Find the value of $x° + y°$.

A 104°

B 116°

C 192°

D 206°

F1 10.1 LUAS & PERIMETER

Trial 2023, SMKA/SABK (SET1) , Q4,

26 Luas segi empat sama ialah 289 cm^2 . Cari perimeter dalam cm, segiempat sama itu

The area of a square is 289 cm^2.

Find perimeter, in cm, of the square.

A 17

B 34

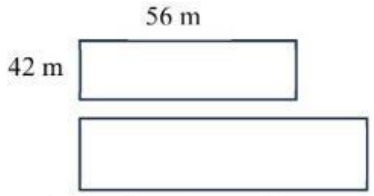
C 60

D 68

Trial 2023, SMKA/SABK (SET1) , Q7,

27 Rajah 1 berikut menunjukkan sebuah dewan dan dua buah kelas.

Diagram 1 below shows a hall and two classrooms.



Diberi panjang dan lebar dewan masing-masing ialah 56 m dan 42 m, manakala lebar sebuah kelas ialah $\frac{2}{3}$ lebar dewan. Jika luas dewan adalah sama dengan luas dua buah kelas, hitung panjang, dalam m, bagi sebuah kelas.

Given that the length and the width of the hall are 56 m and 42 m respectively, while the width of a classroom is $\frac{2}{3}$ of the width of the hall. If the area of the hall is the same as the area of two classrooms, find the length, in m, of a classroom.

A 56 m

B 37 m

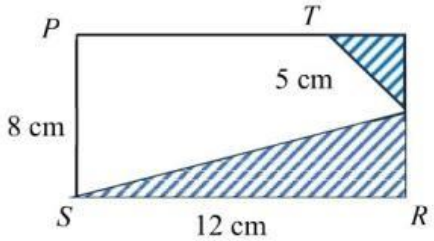
C 42 m

D 28 m

Trial 2023, SBP , Q23,

28 Rajah 14 menunjukkan sebuah segi empat tepat *PQRS*.

Diagram 14 shows a rectangle PQRS.



LIVEWORKSHEETS

12 Antara titik berikut, yang manakah memuaskan $2x - 5y < 11$?
Which of the following points satisfies $2x - 5y < 11$?

A (2, -1)
B (3, -2)
C (5, -1)
D (6, -4)

Trial 2023, SABK/SMKA (SET 2), Q21,

13 Senaraikan semua integer x yang memuaskan ketaksamaan linear $5 - 2x \leq 7$ dan $5(x - 3) < x + 5$.
List all the integers x that satisfy the inequalities $5 - 2x \leq 7$ and $5(x - 3) < x + 5$.

A 0, 1, 2, 3, 4
B 0, 1, 2, 3, 4, 5
C −1, 0, 1, 2, 3, 4
D −1, 0, 1, 2, 3, 4, 5

Trial 2023, PERLIS Q25,

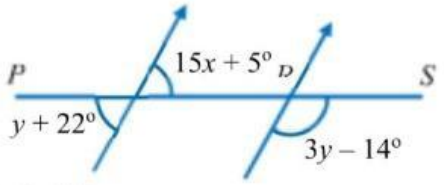
14 Senaraikan semua integer k yang memuaskan ketaksamaan linear $k + 3 > 0$ dan $9k - 20 \leq 16$.
List all the integers k that satisfy the linear inequalities $k + 3 > 0$ and $9k - 20 \leq 16$.

A $-3, -2, -1, 0, 1, 2, 3, 4$
B $-2, -1, 0, 1, 2, 3, 4$
C $-3, -2, -1, 0, 1, 2, 3$
D $-2, -1, 0, 1, 2, 3$

F1, 8.1 GARIS & SUDUT (JENIS & SIFAT KONJUGAT, PENGGENAP, PELENGKAP, GARIS BERSILANG/ BERSERENJANG/ SELARI)

Trial 2023, SABK/SMKA (SET 2), Q13,

15 Dalam Rajah 9, *PQRS* ialah garis lurus.
In Diagram 9, PQRS is a straight line.

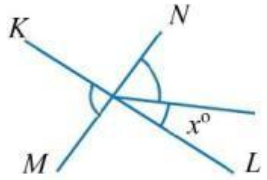


Cari nilai $y - x$.
Find the value of $y - x$.

A 47°
B 43°
C 39°
D 28°

Trial 2023, SMKA/SABK (SET1) , Q10,

16 Rajah 3 menunjukkan dua garis lurus *KL* dan *MN*.
Diagram 3 shows two straight lines KL and MN

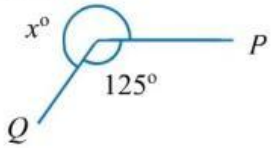


Cari nilai x.
Find the value of x.

A 15°
B 20°
C 25°
D 30°

Trial 2023, P.GUDANG (SET 1), Q4,

17 Dalam Rajah 2, *PO* dan *OQ* ialah dua garisan yang dihubungkan oleh satu sudut 125°.
In Diagram 2, PO and OQ are two lines connected by an angle of 125°.

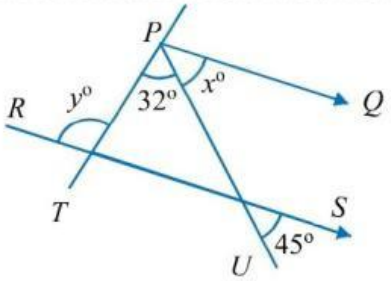


Apakah nama bagi sudut yang bertanda x?
What is the name for the angle marked x?

A Sudut tegak/ *Right angle*
B Sudut tirus/ *Acute Angle*
C Sudut putaran lengkap/ *Complete turning angle*
D Sudut Refleks/ *Reflex Angle*

Trial 2023, JUJ Pahang, Q39,

18 Rajah 16 menunjukkan dua garis lurus, *PT* dan *PU*.
Diagram 16 shows two straight lines, PT and PU



LIVEWORKSHEETS

F1, 1.1 NOMBOR NISBAH (INTEGER, PECAHAN , PERPULUHAN, GARIS NOMBOR, +, - , ×, ÷ & GABUNGAN OPERASI)

Trial 2023, JOHOR (SET 2), Q6,

1 Apakah nilai yang sesuai diletakkan di dalam kotak di bawah?
What is the appropriate value placed in the box below?

$$5.05 + \frac{2}{5} \times (-3.5) = \square \times 2.4$$

A $\frac{43}{16}$
B $\frac{16}{43}$
C $\frac{48}{73}$
D $\frac{73}{48}$

F1, 2.1 FAKTOR DAN GANDAAN (FSTB, GSTK,)

F1, 3.1 KUASA DUA, PUNCA KUASA DUA, KUASA TIGA DAN PUNCA KUASA TIGA (+, - , ×, ÷ & GABUNGAN OPERASI)

Trial 2023, P.GUDANG (SET 1), Q2,

2 Antara yang berikut, yang manakah BENAR berkaitan dengan punca kuasa dua sempurna?
Which of the following is TRUE regarding the perfect square root ?

A $\sqrt{36} = \sqrt{6 \times 6}$
B $\sqrt{64} = \sqrt{2 \times 32}$
C $\sqrt{24} = \sqrt{4.9 \times 4.9}$
D $\sqrt{45} = \sqrt{3 \times 15}$

F2 4.1 NISBAH ($a : b : c$), KADAR (PERTUKARAN UNIT) , KADARAN (KAEDAH TERMASUK PENDARABAN SILANG DAN KAEDAH UNITARI)

Trial 2023, SMKA/SABK (SET1) , Q31,

3 Maklumat di bawah menunjukkan nisbah skor yang diperoleh Kumpulan P dan Kumpulan Q dalam suatu pertandingan kuiz.
The information below shows the ratio of scores obtained by Group P and Group Q in a quiz competition

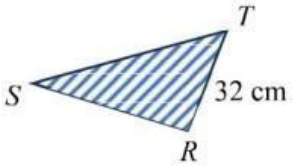
Nisbah skor Kumpulan P	Nisbah skor Kumpulan Q
Cheng : Rahimi : Hussin	Nureen : Bala : Shanthy
5 : 4 : 7	3 : 2 : 1

Jumlah skor yang diperoleh Kumpulan P ialah 144 manakala jumlah skor yang diperoleh Kumpulan Q ialah 168. Cari hasil tambah skor Rahimi dan Nureen.
The total score obtained by Group P is 144 while the total score obtained by Group Q is 168. Find the sum of the scores of Rahimi and Nureen.

A 60
B 84
C 120
D 147

Trial 2023, SBP , Q11,

4 Rajah 7 menunjukkan sebuah segi tiga *RST*.
Diagram 7 shows a triangle RST.



Diberi nisbah $RS : ST : TR = 1 : 2 : \frac{1}{2}$. Hitung perimeter, dalam cm, segi tiga *RST*.
Given ratio $RS : ST : TR = 1 : 2 : \frac{1}{2}$. Calculate the perimeter, in cm, *of triangle RST.*

A 104
B 112
C 224
D 256

F1, 5.1 UNGKAPAN ALGEBRA

Trial 2023, SBP , Q22,

5 Azman membeli 8 biji kek coklat dengan harga RMy setiap satu, 4 potong kek strawbri dengan jumlah harga RM16 dan 4 biji kek tiramisu dengan harga RM4y setiap satu.
Ungkapkan jumlah harga kek yang dibayar dalam sebutan y.
Azman bought 8 chocolate cakes at the price of RMy *each,* 4 *slices of strawberry cakes at the price of* RM16 *and* 4 *tiramisu cakes at the price of* RM4y *each. Express the total price of cakes in terms of y.*

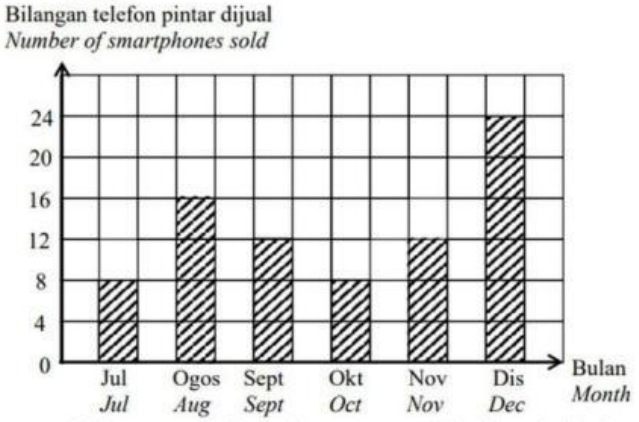
A $12y + 16$
B $12y + 64$
C $24y + 16$
D $24y + 64$

Trial 2023, JUJ Pahang, Q28,

LIVEWORKSHEETS

Trial 2023, SABK/SMKA (SET 2), Q25,

33 Rajah 13 ialah carta palang yang menunjukkan bilangan telefon pintar yang dijual oleh Daniel pada bulan Julai hingga Disember 2022.
Diagram 13 is a bar chart showing the number of smartphones sold by Daniel from July to December 2022.



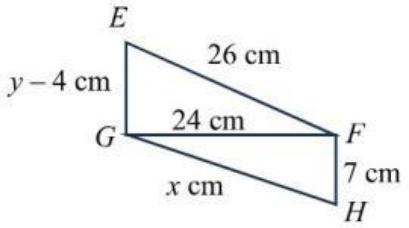
Bilangan telefon pintar yang dijual pada bulan Julai hingga Disember adalah 2.5% kurang daripada bilangan telefon pintar yang dijual pada bulan Januari hingga Jun. Keuntungan yang diperoleh Daniel bagi sebuah telefon pintar ialah RM350. Hitungkan jumlah keuntungan yang diperoleh Daniel dalam tahun itu
The number of smartphones sold from July to December is 2.5% less than the number of smartphones sold from January to June. The profit earned by Daniel for each smartphone sold was RM350. Calculate the total profit earned by Daniel in that year.

A RM27 300
B RM28 000
C RM55 300
D RM56 700

F1, 13.1 TEOREM PYTHAGORAS & AKAS

Trial 2023, SBP , Q12,

34 Rajah 8 menunjukkan dua segi tiga bersudut tegak, *EFG* dan *HGF*.
Diagram 8 shows two right-angled triangles, EFG and HGF.

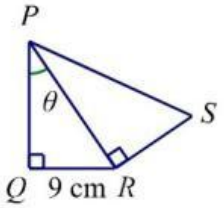


Hitung $x - y$.
Calculate the value of $x - y$.

A 19 cm
B 15 cm
C 12 cm
D 11 cm

Trial 2023, SMKA/SABK (SET1) , Q19,

35 Rajah 6 berikut menunjukkan segitiga bersudut tegak *PQR* dan *PRS*. Diberi bahawa $\tan\theta = \frac{3}{4}$ dan $PS = \frac{5}{3}PR$
Diagram 6 shows right-angled triangles PQR and PRS. Given that $\tan\theta = \frac{3}{4}$ and $PS = \frac{5}{3}PR$



Hitung, dalam cm, panjang *PS*.
Calculate, in cm, the length of PS.

A 9 cm
B 15 cm
C 22 cm
D 25 cm

Trial 2023, PERLIS Q32,

36 Dalam satu pertandingan mencari harta karun, Siti bergerak dari Stesen A ke utara menuju Stesen B sejauh 93 m. Dia kemudian bergerak ke timur menuju ke Stesen C sejauh 37 m. Seterusnya, Siti bergerak pulang ke Stesen A. Dengan menganggap semua pergerakan Siti dalam garis lurus, hitung jarak, dalam m, Stesen A ke Stesen C
In a treasure hunt competition, Siti moves from Station A to the north towards Station B for a distance of 93 m. He then moves east towards Station C for a distance of 37 m. Next, Siti moves back to Station A. Assuming all of Siti's movements are in a straight line, calculate the distance, in m, from Station A to Station C.

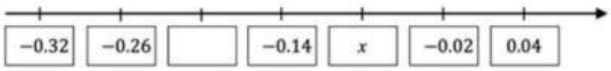
A 64.50
B 85.32
C 100.08
D 100.09

F2, 1.1 POLA & JUJUKAN

LIVEWORKSHEETS

Trial 2023, P.GUDANG (SET 1), Q1,

37 Garis nombor pada Rajah 1 menunjukkan turutan mengikut pola menaik.
The number line on Diagram 1 shows the sequence in an ascending pattern



Manakah nombor perpuluhan yang sesuai menggantikan x?
Which decimal number is suitable to replace x?

A -0.20
B -0.08
C 0.08
D 0.20

F2, 2.1, PEMFAKTORAN DAN PECAHAN ALGEBRA

Trial 2023, PERLIS Q26,

38 $\dfrac{m-n}{3m+n} \div \dfrac{(m-n)^2}{6m+2n} =$

A $\dfrac{2}{m+n}$
B $\dfrac{2}{m-n}$
C $\dfrac{(m-n)^3}{18m^2+12mn+2n^2}$
D $\dfrac{6m+2n}{3m^2-2mn-n^2}$

Trial 2023, SBP , Q21,

39 Ringkaskan/ *Simplify:*

$$\frac{pt+tu}{16t^2-1} \div \frac{p^2-u^2}{16t^2-16t+3}$$

A $\dfrac{pt-tu}{(4t-1)(4t-3)}$
B $\dfrac{4t^2-3t}{(4t+1)(p-u)}$
C $\dfrac{(tp+tu)(4t-3)}{(4t-1)(p-u)}$
D $\dfrac{4t^2+3t}{(4t-1)(p+u)}$

Trial 2023, SABK/SMKA (SET 2), Q20,

40 Fateh menerima wang saku sebanyak RM($k^2 - 25$) untuk ($k + 5$) hari. Nukman pula menerima wang saku sebanyak RM$(k + 5)^2$ untuk $(k^2 - 5^2)$ hari. Hitung hasil darab wang saku harian Fateh dan Nukman.
Fateh received pocket money of RM($k^2 - 25$) *for* ($k + 5$) *days. Nukman received pocket money of* RM$(k + 5)^2$ *for* $(k^2 - 5^2)$ *days. Calculate the product of Fateh and Nukman's daily pocket money.*

A RM($k + 5$)
B RM($k - 5$)
C RM($k^2 - 5$)
D RM($k^2 - 25$)

F2, 3.1, RUMUS ALGEBRA

Trial 2023, SMKA/SABK (SET1) , Q6,

41 Diberi $t = \frac{2}{3} + \frac{m}{4}$, ungkapkan m dalam sebutan t.
Given $t = \frac{2}{3} + \frac{m}{4}$, *Express m in terms of t.*

A $m = \frac{3t-2}{3}$
B $m = \frac{3t+3}{3}$
C $m = \frac{4(3t-2)}{3}$
D $m = \frac{4(2+3t)}{3}$

Trial 2023, SABK/SMKA (SET 2), Q18,

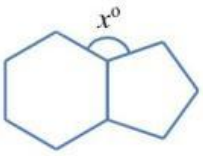
42 Diberi $L = \sqrt{4M + 3}$, ungkapkan M dalam sebutan L.
Given $L = \sqrt{4M + 3}$, *express M in terms of L.*

A $M = \frac{\sqrt{L}-3}{4}$
B $M = \sqrt{L} + 3$
C $M = \frac{L^2-3}{4}$
D $M = \frac{L^2+3}{4}$

F2, 4.1, POLIGON

Trial 2023, JUJ Pahang, Q7,

43 Rajah 1 menunjukkan gabungan sebuah heksagon sekata dan sebuah pentagon sekata.
Diagram 1 shows a combination of a regular hexagon and a regular pentagon.



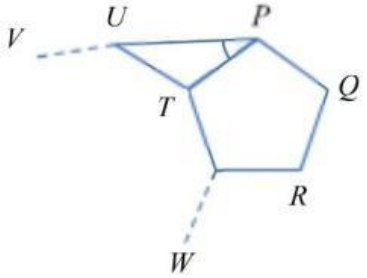
Tentukan nilai x.
Determine the value of x.

LIVEWORKSHEETS

A 132°
B 145°
C 150°
D 154°

Trial 2023, PERLIS Q31,

44 Rajah 14 menunjukkan sebuah pentagon sekata *PQRST* dan sebuah segi tiga sama kaki *PTU*. *WSTUV* ialah sebahagian daripada sebuah poligon sekata
Diagram 14 *shows a regular pentagon PQRST and an isosceles triangle PTU. WSTUV is part of a regular polygon.*

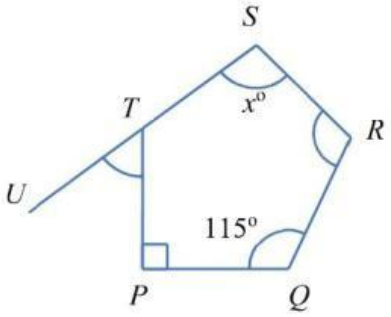


Cari bilangan sisi bagi poligon sekata yang tidak lengkap itu.
Find the number of sides of the incomplete regular polygon.

A 8
B 9
C 10
D 11

Trial 2023, JUJ Pahang, Q34,

45 Rajah 14 menunjukkan sebuah pentagon *PQRST* dan *UTS* ialah suatu garis lurus.
Diagram 14 *shows a pentagon PQRST and UTS is a straight line.*

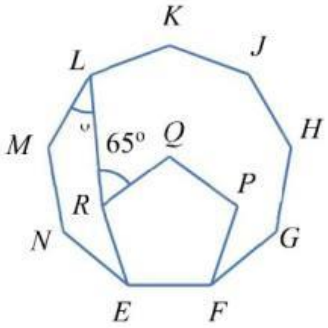


Cari nilai *x*.
Find the value of x.

A 85
B 90
C 95
D 100

Trial 2023, SBP , Q4,

46 Rajah menunjukkan dua poligon sekata, *EFGHJKLMN* dan *EFPQR*.
Diagram shows two regular polygons, EFGHJKLMN and EFPQR.



Tentukan nilai *x*.
Determine the value of x.

A 29°
B 40°
C 41°
D 56°

Trial 2023, SMKA/SABK (SET1) , Q8,

47 Antara pernyataan berikut, yang manakah benar mengenai poligon sekata?
Which of the following statements is true about a regular polygon?

A Sebuah poligon sekata mempunyai sisi yang tidak sama panjang
A regular polygon has irregular sides.

B Saiz sudut pedalaman poligon sekata adalah tidak sama.
The interior angles of a regular polygon are unequal.

C Bilangan paksi simetri bagi sebuah poligon sekata adalah sama dengan bilangan sisi poligon itu.
The number of axes of symmetry of a regular polygon is equal to the number of sides of the polygon.

D Hasil tambah sudut peluaran dan sudut pedalaman sebuah poligon sekata ialah 360°
The sum of exterior angles and interior angles of a regular polygon is 360°

LIVEWORKSHEETS

6 Diberi $3p - 4q = \frac{8+pq}{5}$, ungkapkan q dalam sebutan p.
Given that $3p - 4q = \frac{8+pq}{5}$, express q in terms of p.

A $q = \frac{15p-8}{20+p}$

B $q = \frac{8-15p}{p+20}$

C $q = \frac{15p+8}{p+20}$

D $q = \frac{8+15p}{20-p}$

Trial 2023, UD3 Melaka, Q6,

7 Diberi $5r^2 = 3t + 4s$. Ungkapkan t dalam sebutan r dan s.
Given $5r^2 = 3t + 4s$. Express t in term of r and s.

A $t = \frac{5r^2+4s}{3}$

B $t = \frac{5r^2-4s}{3}$

C $t = \frac{5r^2}{3} - 4s$

D $t = \frac{5r^2}{3} + 5r^2$

Trial 2023, JOHOR (SET 2), Q18,

8 Diberi bahawa $8 - \frac{2}{r^3} = 2s$. Ungkapkan r dalam sebutan s.
Given that $8 - \frac{2}{r^3} = 2s$. Express r in terms of s.

A $\sqrt[3]{\frac{1}{s-4}}$

B $\sqrt[3]{\frac{1}{4-s}}$

C $\sqrt[3]{4-s}$

D $\sqrt[3]{s-4}$

F1, 6.1 PERSAMAAN LINEAR

Trial 2023, SMKA/SABK (SET1) , Q3,

9 Diberi $\frac{x+1}{5} = \frac{2x-1}{2}$, hitung nilai x.
Given $\frac{x+1}{5} = \frac{2x-1}{2}$, calculate the value of x

A $\frac{1}{4}$

B $\frac{3}{4}$

C $\frac{7}{9}$

D $\frac{7}{8}$

Trial 2023, SABK/SMKA (SET 2), Q16,

10 Jadual 1 menunjukkan maklumat bagi buku yang dibeli oleh Muhd Fauzi.
The table 1 shows the information of books bought by Muhd Fauzi.

Mata Pelajaran *Subject*	**Harga sebuah buku** *Price per book*
Matematik/ *Mathematics*	RM 12.70
Sains/ *Science*	RM 8.50

Muhd Fauzi telah membeli 7 buah buku dan membayar dengan sekeping wang kertas RM100. Dia mendapat pulangan baki sebanyak RM23.70. Berapakah jumlah buku matematik yang dibeli oleh Muhd Fauzi?
Muhd Fauzi bought 7 books and paid with a RM100 note. He got the balance of RM23.70. How many mathematics books did Muhd Fauzi buy?

A 2
B 3
C 4
D 5

F1, 6.2 PERSAMAAN LINEAR SERENTAK (TANPA KAEDAH MATRIKS)

F1, 7.1 KETAKSAMAAN LINEAR (GARIS NOMBOR, SIFAT AKAS, TRANSITIF, SONGSANGAN TERHADAP PENAMBAHAN/ PENDARABAN)

Trial 2023, SMKA/SABK (SET1) , Q17,

11 Rajah 4 menunjukkan satu papan had laju.
Diagram 4 shows a sign of speed limit

Diberi x menandakan kelajuan, dalam km/j, bagi sebuah kenderaan yang dibenarkan. Antara berikut, yang manakah adalah benar?
Given x represents speed limit, in km/h, for an authorized vehicle. Which of the following is correct?

A $x = 90$

B $x > 90$

C $x < 90$

D $x \leq 90$

Trial 2023, JOHOR (SET 2), Q36,

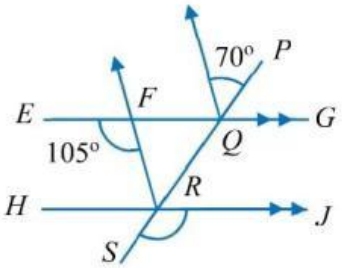
LIVEWORKSHEETS

Cari nilai x dan y.
Find the value x and y.

A $x = 45°, y = 88°$
B $x = 48°, y = 88°$
C $x = 45°, y = 77°$
D $x = 48°, y = 77°$

Trial 2023, UD3 Melaka, Q9,

19 Dalam Rajah 1, *PQRS, EFQG* dan *HRJ* ialah garis lurus.
In Diagram 1, PQRS, EFQG and HRJ are straight lines.

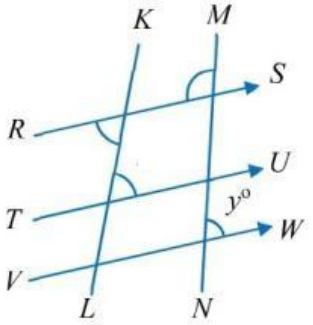


Cari nilai x.
Find the value of x

A 35
B 75
C 125
D 145

Trial 2023, PERLIS Q30,

20 Rajah 13 menunjukkan tiga garis selari, *RS*, *TU* dan *VW*. *KL* dan *MN* ialah garis lurus.
Diagram 13 shows three parallel lines, RS, TU and VW. KL and MN is a straight line.



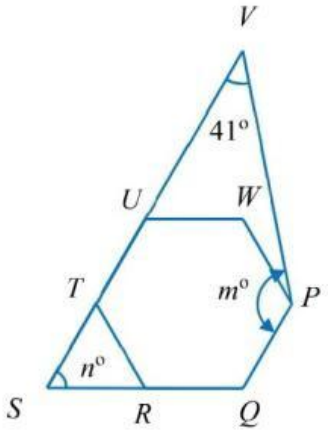
Hitung nilai $x + y$.
Calculate the value of x + y.

A 114
B 140
C 172
D 188

F1, 9.1 POLIGON ASAS (SIFAT, SUDUT PELUARAN/ PEDALAMAN, PEPENJURU)

Trial 2023, UD3 Melaka, Q10,

21 Dalam Rajah 2, *PQRTUW* ialah heksagon sekata. *STUV* dan *SRQ* ialah garis lurus.
In Diagram 2, PQRTUW is a regular hexagon. STUV and SRQ are straight lines



Hitung nilai $m + n$.
Calculate the value of m + n

A 140
B 169
C 199
D 219

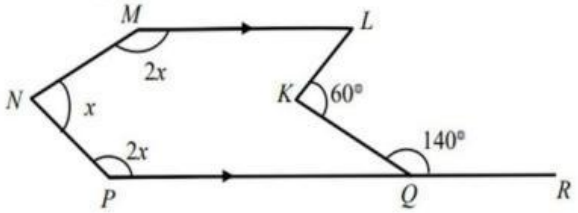
Trial 2023, P.GUDANG (SET 1), Q8,

22 Hitung jumlah satu sudut peluaran bagi heksagon sekata dan oktagon sekata.
Calculate the sum of one exterior angle of a regular hexagon and a regular octagon.

A 45°
B 60°
C 105°
D 255°

Trial 2023, SABK/SMKA (SET 2), Q6,

23 Rajah 2 menunjukkan sebuah poligon *KLMNPQ*. *PQR* ialah garis lurus.
Diagram 2 shows a polygon KLMNPQ. PQR is a straight line.



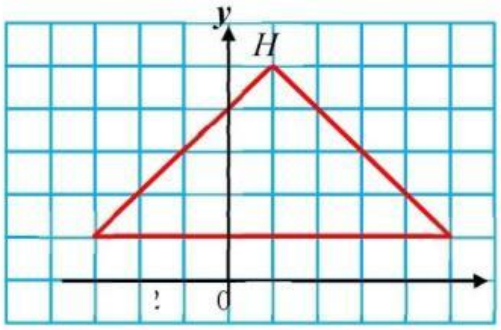
LIVEWORKSHEETS

Diberi U ialah titik tengah bagi QR. Hitung luas, dalam cm^2, kawasan yang tidak berlorek.
Given U is a midpoint of QR. Calculate the area, in cm^2, of unshaded region.

A 30
B 36
C 60
D 66

Trial 2023, UD3 Melaka, Q33,

29 Rajah 9 menunjukkan segi tiga sama kaki HKJ.
Diagram 9 shows an isosceles triangle HKJ



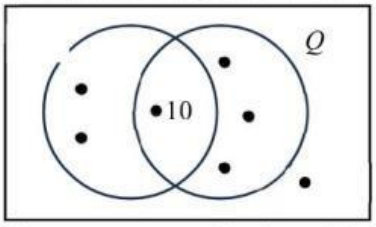
Hitung perimeter segi tiga tersebut.
Calculate the perimeter of the triangle.

A 5.657
B 11.314
C 19.314
D 21.667

F1, 11.1 PENGENALAN SET (PERWAKILAN SET, UNSUR, VENN, SIMBOL, TATATANDA)

Trial 2023, SABK/SMKA (SET 2), Q28,

30 Rajah 14 di bawah ialah suatu gambar rajah Venn yang menunjukkan unsur bagi set P, set Q dan set semesta ξ
In Diagram 14 below is a Venn diagram showing the elements of set P, set Q and the universal set ξ.



Senaraikan semua unsur bagi set P'.
List down all the elements of set P'.

A {1, 7}
B {1, 7, 10}
C {3, 5, 8}
D {3, 5, 8, 12}

Trial 2023, PERLIS Q16,

31 Sempena Kejohanan Sukantara Sekolah, 55 orang murid diminta mendaftar untuk menyertai dua jenis acara sukan. 28 orang murid memilih lompat jauh, 21 orang murid memilih 100 m dan 12 orang murid tidak berjaya mendaftar sebarang acara. Berapakah bilangan murid yang memilih kedua – dua acara sukan tersebut?
In conjunction of the School Standard Sport Day, 55 students were asked to register to participate in two types of sports events. 28 students chose long jump, 21 students chose 100 m and 12 students failed to register any event. How many students chose both sports events?

A 6
B 7
C 43
D 55

F1, 12.1 PENGENALAN DATA (ANALISIS DATA, PERWAKILAN)

Trial 2023, JOHOR (SET 2), Q35,

32 Carta pai pada Rajah 11 menunjukkan bilangan murid Tingkatan 5 yang telah mengikuti kursus komputer secara dalam talian pada suatu hari tertentu.
The pie chart on Diagram 11 shows the number of Form 5 students who have attended an online computer course on a certain day

Diberi bilangan murid dari kelas 5 Tekun yang mengikuti kursus komputer dalam talian ialah 20 orang. Hitung bilangan murid dari kelas 5 Takwa yang mengikuti kursus tersebut.
Given the number of students from 5 Tekun who attended the online computer course is 20. Calculate the number of students from 5 Takwa who attended that course.

A 4
B 8
C 12
D 16

LIVEWORKSHEETS