ULANGKAJI FORM 3

1 Evaluate
Nilaikan

$$3.2\left(8-\frac{1}{2}\right)\div\frac{3}{2}\times 7.2$$

A $115\frac{1}{5}$

B $17\frac{23}{25}$

C $2\frac{2}{9}$

D $6\frac{2}{9}$

2 List five common multiples for 8 and 14.
Senaraikan lima gandaan sepunya bagi 8 dan 14.

A $8, 16, 24, 32, 40$
B $14, 28, 42, 56, 70$
C $56, 70, 78, 92, 100$
D $56, 112, 168, 224, 280$

3 $$\left(\sqrt{12\frac{1}{4}}+\sqrt[3]{0.001}\right)^2$$

A 0.36
B 1.296
C 3.6
D 12.96

4 Which of the following is a linear equation in one variable?
Yang manakah antara berikut merupakan persamaan linear dalam satu pembolehubah?

A $pq-3=9$
B $\frac{k}{3}+1=8$
C $\frac{x}{3}+y=7$
D $c^2+1=5$

5 Diagram 1 below represents two simultaneous linear inequalities on a number line.
Rajah 1 di bawah menunjukkan dua ketaksamaan linear pada suatu garis nombor.

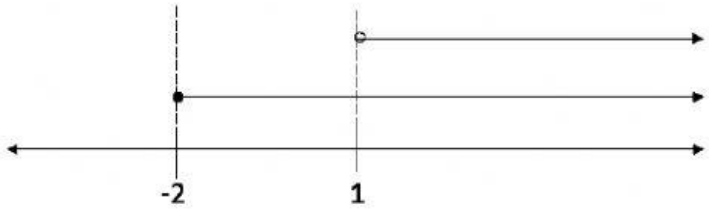


Diagram 1
Rajah 1

Which inequality represents the common part of both inequalities?
Ketaksamaan yang mana satu mewakili bahagian sepunya bagi kedua-dua ketaksamaan?

A $x \geq -2$
B $x > -2$
C $x \geq 1$
D $x > 1$

6 Calculate the perimeter of the following rectangle in Diagram 2.
Hitung perimeter segi empat tepat di dalam Rajah 2 berikut.

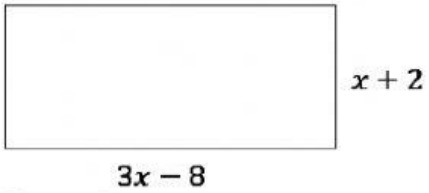


Diagram 2
Rajah 2

A $8x - 12$
B $8x + 12$
C $4x - 6$
D $4x + 6$

7 In the Diagram 3 below, *ABC* is a straight line.
Dalam Rajah 3 di bawah, ABC adalah garis lurus.

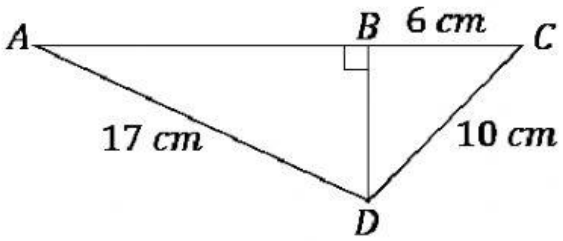


Diagram 3
Rajah 3

Find the total area of the diagram.
Kira jumlah luas rajah tersebut.

A 84
B 92
C 98
D 128

8 Given that $Q = \{x: x \text{ is a two digit number such that the sum of its digits is } 10\}$. Find $n(Q)$.
Diberi $Q = \{x: x \text{ adalah nombor dua digit dan mana hasil tambah digit adalah } 10\}$.
Cari $n(Q)$.

A 11
B 10
C 9
D 8

9 Diagram 4 shows a sequence of numbers.
Rajah 4 menunjukkan suatu jujukan nombor.

$$84, 86, p, 84, 80, 82, q, 80$$

Diagram 4
Rajah 4

The value of *p* and *q* is
Nilai bagi p dan q adalah

A $p = 88\,;\, q = 84$
B $p = 88\,;\, q = 78$
C $p = 82\,;\, q = 84$
D $p = 82\,;\, q = 78$

10 Factorize completely
Faktorkan selengkapnya

$$3x^2 - 147$$

A $(x + 7)(x - 7)$
B $3(x + 7)(x - 7)$
C $(3x + 7)(x - 7)$
D $(x + 7)(3x - 7)$

11 In Diagram 5, *PQ* is a straight line on a Cartesian Plane.
Dalam Rajah 5, PQ adalah garis lurus pada Satah Cartes.

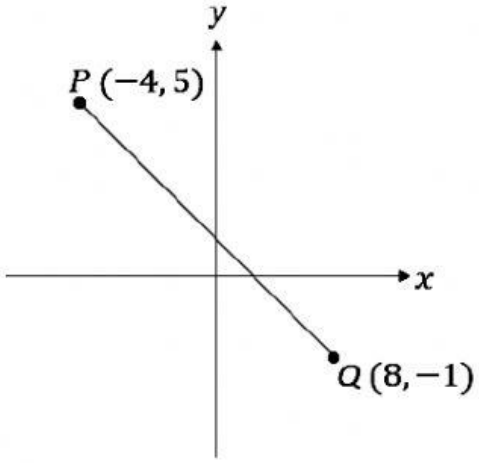
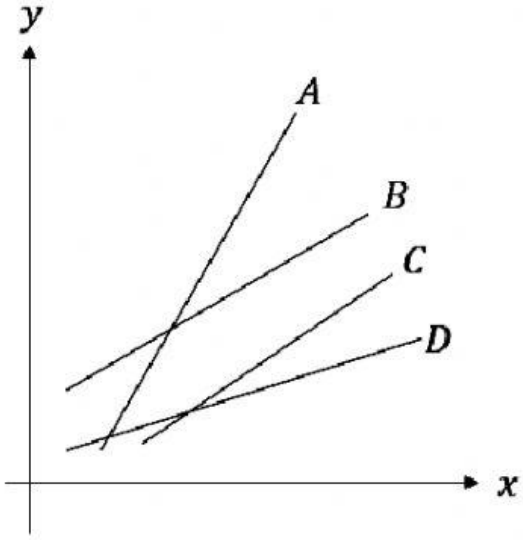


Diagram 5
Rajah 5
Find the midpoint of *PQ*.
Cari titik tengah PQ.

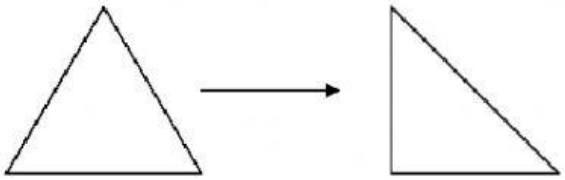
A (6, 3)
B (6, 2)
C (2, 2)
D (2, 3)

12 Which of the following straight line has the highest gradient?
Garis lurus yang manakah mempunyai kecerunan yang paling tinggi?

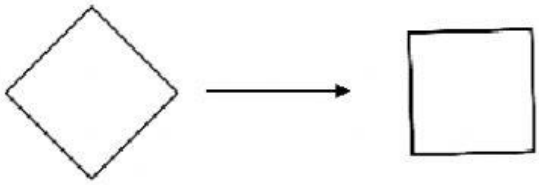


13 Which of the following shows a transformation?
Yang manakah antara berikut menunjukkan penjelmaan?

A



B



C

D

14 Determine the median of the following data:
Tentukan median bagi data berikut:

$$4,3,2,0,0,3,5,6,7$$

A 0
B 2
C 3
D 4

15 Which of the following is stated correctly in standard form?
Yang manakah antara berikut dinyatakan dengan betul dalam bentuk piawai?

	Number ***Nombor***	**Standard form** ***Bentuk piawai***
A	0.0665	6.65×10^{2}
B	0.800	8.00×10^{-1}
C	93.08	9.308×10^{-1}
D	3044	30.44×10^{2}

16 Mr. Emanuel obtained a personal loan of $RM25000$ from Bank Luhur with an interest rate of 4% per annum. The repayment period is 10 years. What is the monthly instalment to be paid by Mr. Emanuel?
En. Emanuel memperolehi pinjaman peribadi sebanyak RM25000 daripada Bank Luhur dengan kadar faedah 4% setahun. Tempoh bayaran balik adalah selama 10 tahun. Berapakah bayaran ansuran bulanan yang akan dibayar oleh En. Emanuel?

A $RM291.00$
B $RM291.67$
C $RM292.00$
D $RM292.67$

17 Which of the following angles are convert correctly to degree and minutes?
Yang manakah antara sudut berikut ditukar dengan betul menjadi darjah dan minit?

	Angles in degree ***Sudut dalam darjah***	**Angles in degree and minute** ***Sudut dalam darjah dan minit***
A	$16.9°$	$16° 55'$
B	$32.7°$	$32° 40'$
C	$60.5°$	$60° 29'$
D	$72.3°$	$72° 18'$

18 Calculate the value of *x* in the Diagram 6 below.
Hitung nilai x dalam Rajah 6 di bawah.

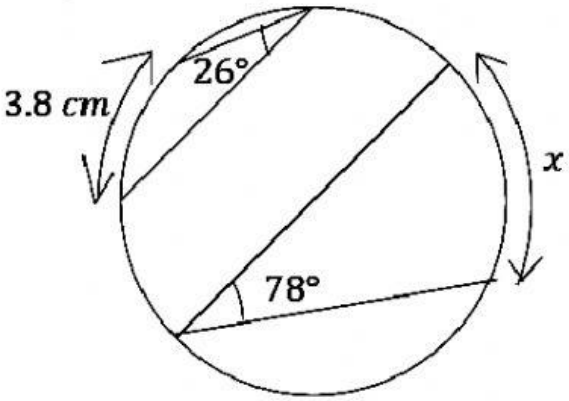


Diagram 6
Rajah 6

A 3.8
B 7.6
C 11.4
D 15.2

19 The Diagram 7 below shows a square *PQRS*.
Rajah 7 di bawah menunjukkan segi empat sama PQRS.

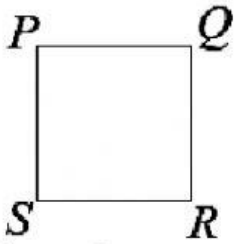


Diagram 7
Rajah 7

Determine the locus of point *Y* which is always equidistant from the point *P* and point *R*.
Tentukan lokus bagi titik Y yang sentiasa berjarak sama dari titik P dan titik R.

A *PR*
B *QS*
C *PS*
D *SR*

20 Determine the *y*-intercept of the straight line $-3y = -3x + 15$
Tentukan pintasan-y bagi garis lurus $-3y = -3x + 15$

A -15
B -5
C 5
D 15