CCSLC®
Mathematics

CARIBBEAN EXAMINATIONS COUNCIL

CARIBBEAN CERTIFICATE OF SECONDARY LEVEL COMPETENCE®

MATHEMATICS SYLLABUS

Effective for examinations from May–June 2012

C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L

CARIBBEAN CERTIFICATE OF SECONDARY LEVEL COMPETENCE EXAMINATION

SPECIMEN
MULTIPLE CHOICE QUESTIONS
FOR

MATHEMATICS

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

Each item in this test has four suggested answers lettered (A), (B), (C), (D). Read each item you are about to answer and decide which choice is best.

Sample Item

10% of 250 =   Sample Answer

(A)   2.5   (A) (B) (C) (D)
(B)   25
(C)   260
(D)   2500

The best answer to this item is "25", so you should blacken answer space (B).

05134010/SPEC 2010

1. The digit which has a value of tenth in 35.427 is

    (A) 2
    (B) 3
    (C) 4
    (D) 5

2. What is the missing number in the sequence: 2, 5, 8, ___, 14?

    (A) 10
    (B) 11
    (C) 12
    (D) 13

3. If $\square + 2 \times 7 = 18$, the value of $\square$ is:

    (A)   4
    (B)   9
    (C) 13
    (D) 32

4. What is the sum of 1^2 and 3^2?

    (A)   8
    (B) 10
    (C) 11
    (D) 16

5. If 'a' is an odd number, which of the following is also odd?

    (A) a + 1
    (B) a + 2
    (C) 2a
    (D) a/2

6. The table below shows the number of boys and the number of girls in Class 2.

Boys	Girls
12	16

    What is the ratio of boys to girls?

    (A) 3:4
    (B) 3:7
    (C) 4:3
    (D) 4:7

7.   When expressed to the nearest hundred, 458 becomes

(A)   400
(B)   450
(C)   460
(D)   500

8.   A sum of money is divided between Ken and Rose in the ration 2:3. If Rose receives $90.00, find the sum of money shared.

(A) $ 54.00
(B) $ 60.00
(C) $135.00
(D) $150.00

The sign below shows the cost of fuel at a service station.   Use the information to answer **item 9**.

```
┌─────────────────────────────────┐
│                                 │
│   FUEL COST (per litre)         │
│                                 │
│   Diesel -------------- $5.50   │
│                                 │
│   Gasoline ----------- $6.35    │
│                                 │
└─────────────────────────────────┘
```

9.   The tank of a truck holds 15 litres of diesel when full. The tank is 1/3 full of diesel. How much money is required to fill the tank?

(A) $11.84
(B) $27.50
(C) $55.00
(D $82.50

Item 10 refers to the following pattern.

```
                    *
          *         *
*        ***      *****
          *         *
                    *
1st      2nd       3rd
```
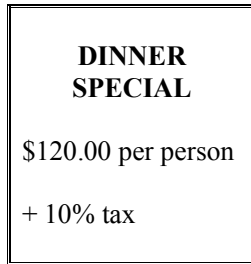
10.   How many asterisks (*) are needed for the 4th pattern?

(A)   13
(B)   15
(C)   17
(D)   18

Use the information below to answer **item11.**

$$\boxed{\textbf{\$1.00 US = \$90.00 Jamaica}}$$

11. What is the value of US$5.00 in Jamaican dollars?

    (A) $ 18.00
    (B) $ 85.00
    (C) $ 95.00
    (D) $450.00

12. What is 5% of $40.00?

    (A) $ 2.00
    (B) $ 8.00
    (C) $20.00
    (D) $35.00

13. The simple interest on $600.00 at 5% per year for two years is

    (A) $\dfrac{\$600.00 \times 100 \times 2}{5}$

    (B) $\dfrac{\$600.00 \times 5 \times 2}{100}$

    (C) $\dfrac{\$600.00 \times 5}{2 \times 100}$

    (D) $\dfrac{\$600.00 \times 100 \times 5}{2}$

14. Which of the following is the largest amount?

    (A)   5% of 500
    (B)   10% of 200
    (C)   15% of 150
    (D)   20% of 50

15. There are 150 shops in a mall, 30% of them sell clothes. How many shops do NOT sell clothes?

    (A)   20
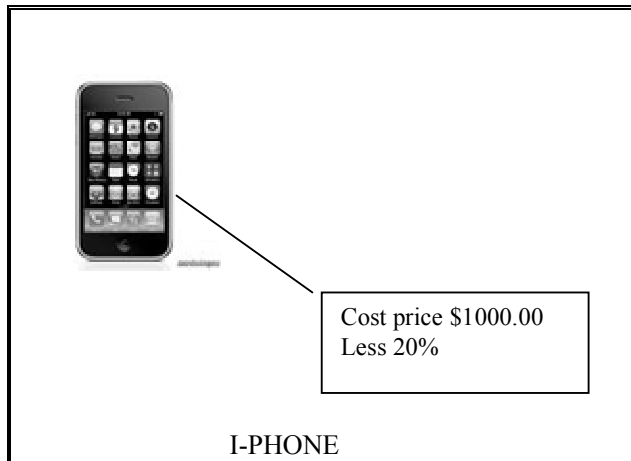   (B)   45
    (C)   105
    (D)   130

A restaurant displays the sign below

```
┌─────────────────────────┐
│                         │
│        DINNER           │
│        SPECIAL          │
│                         │
│   $120.00 per person    │
│                         │
│   + 10% tax             │
│                         │
└─────────────────────────┘
```

16. The total bill for one dinner is:

(A) $108.00
(B) $110.00
(C) $130.00
(D) $132.00

Use the information below to answer **item 17.**

Cost price $1000.00
Less 20%

I-PHONE

17. How much does the customer pay for the I-Phone?

(A) $ 200.00
(B) $ 800.00
(C) $1200.00
(D) $1980.00

18. A dress costs $75.00. There is a 60% discount on all items. What is the discounted price of the dress?

    (A) $ 30.00
    (B) $ 45.00
    (C) $105.00
    (D) $120.00

US $1 = EC$2.70

---

19. Noah bought a Blackberry for US$300.00. He sells it for EC$540.00. What is his loss in US dollars?

    (A) $100.00
    (B) $240.00
    (C) $270.00
    (D) $271.00

Use the information below to answer **item 20.**

Prices at a local grocery store:

1 kg rice	$1.30
1 tin milk	$2.00
1 pack kool-aid	$0.50

20. What is the total cost of 2kgs of rice, 1 tin milk and 5 packs of kool-aid?

    (A) $3.80
    (B) $6.60
    (C) $7.10
    (D) $8.80

21. What is ¾ as a percentage?

    (A)   0.75%
    (B)   7.5%
    (C)   75%
    (D)   750%

Use the information below to answer **items 22 – 23.**

A group of 30 students is planning a New Year's Eve party. The table below shows the items needed and the cost of each item.

Item Needed	Cost
Hats	$2.50 each
Noisemakers	$4.00 per pack of 5
Balloons	$5.00 per pack of 10

22.   How many packs of noisemakers can be bought with $35.00?

(A)   2
(B)   5
(C)   7
(D)   8

23.   The group has a budget of $165.00. Each student will get 1 hat and 1 noisemaker. How many balloons can the group buy?

(A)   33
(B)   130
(C)   190
(D)   300

Items 24 – 25 refer to the table below which gives details of a special offer for a weekend holiday**.**

Airfare	Adults $75.00 Children under 15 years – $40.00
Accommodation	$100.00 each or $350.00 for family of 4

24.   A man, his wife and two children aged 17 years and 13 years, wish to have a weekend holiday. What is the LEAST cost to the family for the holiday?

(A) $585.00
(B) $615.00
(C) $635.00
(D) $665.00

25. The children invited their 16- year- old cousin to come along with them and their parents on the vacation. What is the new cost of the trip?

(A) $615.00
(B) $665.00
(C) $690.00
(D) $790.00

26. The diagonals of a quadrilateral bisect at right angles. What type of quadrilateral is this?

(A) Rectangle
(B) Square
(C) Trapezium
(D) Parallelogram

Item 27 refers to the diagram below, where AB is paralled to CD.
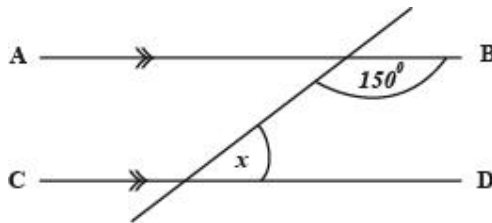


27. The value of x is:

(A) 75°
(B) 85°
(C) 95°
(D) 105°

Use the information below to answer **items 28 – 29.**
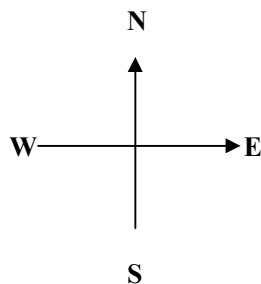
28. John is facing East. He turns 270° anti-clockwise. John is now facing

(A) North
(B) South
(C) East
(D) West

29. John turns clockwise from East to a South-West direction. What is the size of the angle through which he turns?

   (A)   90°
   (B)   135°
   (C)   180°
   (D)   225°

Item 30 refers to the diagram below which shows a triangle with 3 unequal sides.
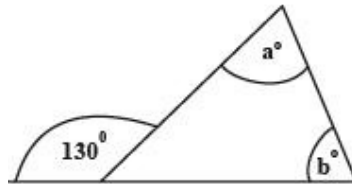
30. Which of the following BEST describes the relationship among the angles.

   (A)   a = b
   (B)   b = a + 50
   (C)   a + b = 50°
   (D)   a + b = 130°

Use the information on the diagram below to answer **item 31.**

1kg flour

31. What is the mass in grams of the package of flour?

   (A)   10
   (B)   100
   (C)   1 000
   (D)   10 000

GO ON TO THE NEXT PAGE

32. Which of the following gives the value of pi (π)?

(A) circumference
     diameter

(B) circumference
     radius

(C) diameter
     circumference

(D) radius
     circumference

Item 33 refers to the diagram below which shows a cuboid.
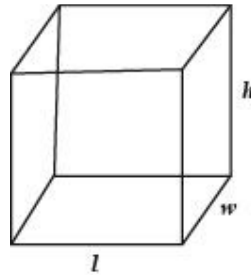
33. The volume of the cuboid is given by:

(A) $l+w+h)$
(B) $2(l+w+h)$
(C) $l×w×h$
(D) $2(l×w×h)$

Use the information below to answer **item 34.**

2.2 lbs = 1 kg

34. A bag of potatoes has a mass of 44 lbs. How many kg does the bag of potatoes weigh?

(A)   20.0
(B)   41.8
(C)   46.2
(D)   96.8

GO ON TO THE NEXT PAGE

35. Which of the following tables list the most appropriate unit for measuring the length of each of the objects?

(A)

Object	Unit
Pencil	cm
Highway	km
Netball court	m

(B)

Object	Unit
Pencil	cm
Highway	m
Netball court	km

(C)

Object	Unit
Pencil	m
Highway	km
Netball court	cm

(D)

Object	Unit
Pencil	km
Highway	m
Netball court	cm

Item 36 refers to the following rectangle.

4cm

pcm
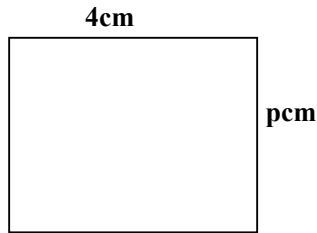
36. What is the perimeter of the rectangle in cm?

(A) p + 4
(B) p + 8
(C) 2p + 4
(D) 2p + 8

37.

1 lb = 16 ozs
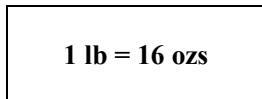
A recipe requires 3lbs of sugar to make two dozen cupcakes. How many ounces of sugar will be needed to make half dozen cupcakes?
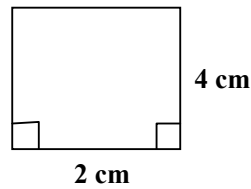
(A) 2
(B) 4
(C) 9
(D) 12

GO ON TO THE NEXT PAGE

38.   Clock Q is ten minutes faster than Clock P. Which of the following BEST represents this information?

	Clock Q	Clock P
(A)	8:00	7:50

	Clock Q	Clock P
(B)	8:00	8:10

	Clock Q	Clock P
(C)	7:50	8:00

	Clock Q	Clock P
(D)	7:50	8:10

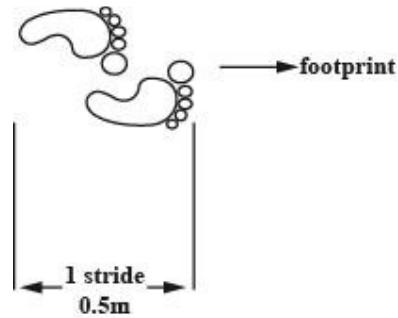Use the information below to answer **item 39.**

The area of the rectangle PQRS is 8 cm.

4 cm

2 cm

39.   Which of the rectangles below has an area which is twice that of the rectangle PQRS?

(A)

8 cm

4 cm

(B)

2 cm

4 cm

(C)

6 cm

4 cm

(D)

2 cm

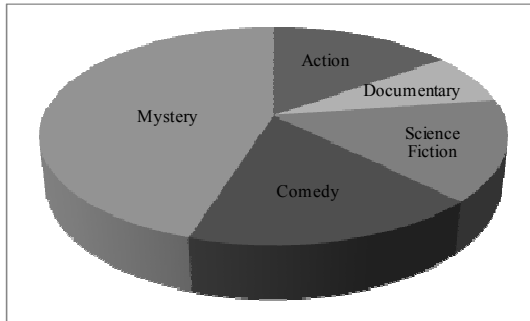**8 cm**

GO ON TO THE NEXT PAGE
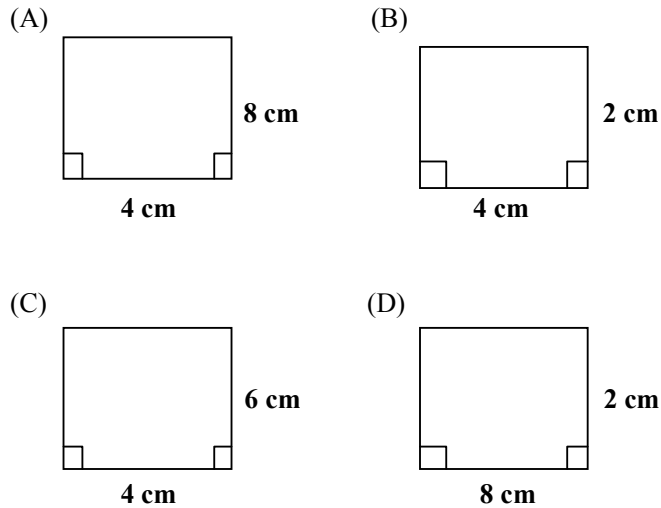
Item 40 refers to the diagram below which shows Mark's stride.

40.   Mark travels a distance of 300 m. How many strides does he make?

(A)   60
(B)   150
(C)   600
(D)   1 500

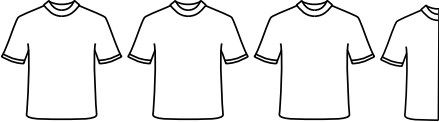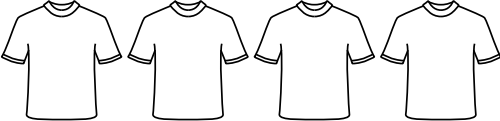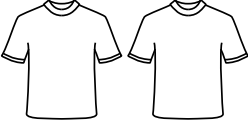**Item 41** refers to the following information.

The local video store conducted a survey on the type of movies people rented from the store. The data is shown below.

41.   Which type of movie was MOST rented?

(A)   Comedy
(B)   Science Fiction
(C)   Action
(D)   Mystery

Use the information below to answer **items 42 – 43**.

The School's Drama Club held a T-shirt sale to raise funds for the purchase of a computer. The graph below shows the number of T-shirts sold during the period January to April.

| Month	Number of T-shirts
January	
February	
March	
April	

 equals 10 T-shirts

42. How many T-shirts were sold during the months of January and February?

(A) 50
(B) 70
(C) 80
(D) 85

43. During which month were the MOST T-shirts sold?

(A) January
(B) February
(C) March
(D) April

Items 44 – 46 refer to the numbers below which represent the heights in cm of seedlings.

<div style="border:1px solid black; display:inline-block; padding:10px;">
10, 20, 43, 30, 10, 10
</div>

44.   What is the median height of the seedlings?

    (A)   10
    (B)   15
    (C)   20
    (D)   30

45.   What is the modal height of the seedlings?

    (A)   10
    (B)   20
    (C)   30
    (D)   43

46.   What is the mean height of the seedlings?

    (A)   10.0
    (B)   20.5
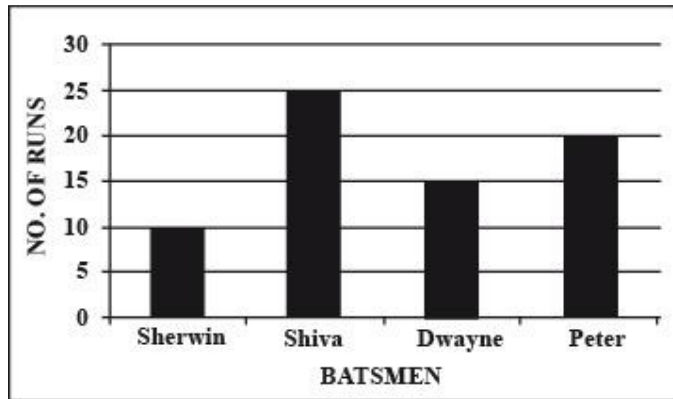   (C)   36.5
    (D)   43.0

Item 47 refers to the spinner below which is divided into six equal sections.
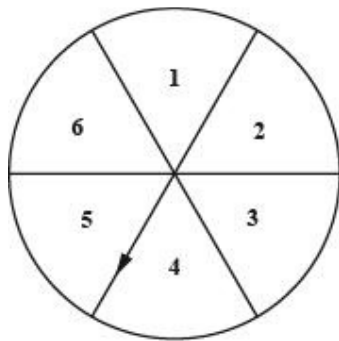
47.   What is the probability that the arrow will land in the space labeled with an odd number?

    (A)   1/6
    (B)   1/3
    (C)   1/2
    (D)   2/3

GO ON TO THE NEXT PAGE

Item 48 refers to the diagram below which shows the scores for four batsmen on a cricket team.

48. The cricket team made a total of 120 runs. How many runs were scored by the rest of the team?

(A) 15
(B) 30
(C) 50
(D) 75

49. There are four teams in a competition. Each team plays each other once. How many games are played in the competition?

(A) 4
(B) 6
(C) 10
(D) 16

Item 50 refers to the graph below which compares the rainfall in St. Kitts and Trinidad during a rainy season.
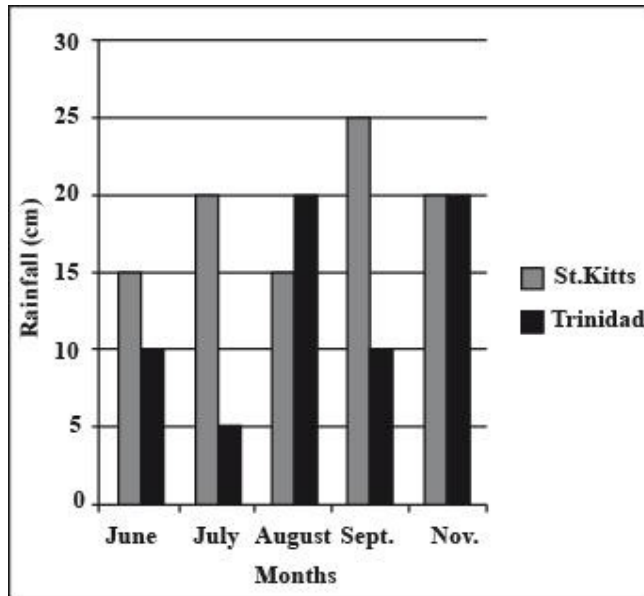
50.   How much more rain does St. Kitts get than Trinidad during the rainy season?

(A)   30
(B)   65
(C)   95
(D)   160

C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L

CARIBBEAN CERTIFICATE OF SECONDARY LEVEL COMPETENCY

MATHEMATICS

SPECIMEN PAPER 2010

Question No.	Syllabus Objective	Key	Skill	Question No.	Syllabus Objective	Key	Skill
1	1.A.1	C	C/K	26	3.B.4	B	C/K
2	1.B.10	B	C	27	3.A.2	A	C
3	1.C.13	A	C	28	3.A.3	B	C
4	1.E.18	B	C	29	3.A.3	B	R/A
5	1.A.3	B	C	30	3.B.6	D	R/A
6	1.D.15	A	C/K	31	4.A.4	C	C/K
7	1.A.7	D	C/K	32	4,A.6	A	C/K
8	1.D.17	D	R/A	33	4.C.8	C	C/K
9	1.A.8	C	R/A	34	4.A.5	A	C
10	1.C.9	A	R/A	35	4.A.2	A	C
11	2.B.7	D	C/K	36	4.B.6	D	C
12	2.A.1	A	C/K	37	4.A.5	D	C
13	2.D.21	B	C/K	38	4.E.14	A	R/A
14	2.A.3	A	C/K	39	4.B.6	D	R/A
15	2.A.3	C	C/K	40	4.A.3	C	R/A
16	2.D.14	D	C	41	5.D.10	D	C/K
17	2.D.14	B	C	42	5.D.10	D	C/K
18	2.D.14	A	C	43	5.D.10	A	C/K
19	2.D.16	A	C	44	5.C.7	B	C
20	2.C.9	C	C	45	5.C.7	A	C
21	2.A.2	A	C	46	5.C.7	B	C
22	2.C.9	D	R/A	47	5.E.24	B	C
23	2.C.9	B	R/A	48	5.D.10	C	R/A
24	2.C.10	B	R/A	49	5.D.12	B	R/A
25	2.C.10	D	R/A	50	5.D.12	A	R/A