Hunter Region
Independent Schools

Diocese of Maitland - Newcastle
Catholic Schools Office

NEW SOUTH WALES
DEPARTMENT
OF EDUCATION
AND TRAINING

NEWCASTLE PERMANENT
BUILDING SOCIETY LTD.

Sponsor of

THE HUNTER
PRIMARY MATHEMATICS COMPETITION

Wednesday, 11th October, 2000

Time allowed: 45 minutes

Instructions:

1. Do **NOT** open this booklet until told to do so by your teacher.

2. Calculators, rulers, geometrical instruments or other aids are **NOT** permitted.
   Working paper will be supplied by your teacher if required.
   NO working is to be shown on your answer sheet.

3. All answers **MUST** be recorded in **PENCIL** on your answer sheet.
   A **2B PENCIL** is recommended.

4. When your teacher gives the signal, begin working on the problems.
   You have 45 minutes working time.

5. Marks will **NOT** be deducted for incorrect answers.

SECTION A

Each question in this section is worth 2 marks.
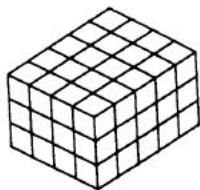
1. 823   The answer is:
    - 524
    _____

    (A) 299   (B) 301   (C) 309   (D) 399

2. Jack bought a book for $13.65 and a magazine for $4.45. How much did he spend altogether?

    (A) $17.00   (B) $17.10   (C) $18.00   (D) $18.10

3. A triangular pyramid has how many faces?

    (A) 3   (B) 4   (C) 5   (D) 6

4. In the decathlon, an athlete is required to compete in how many different events?

    (A) 5   (B) 7   (C) 10   (D) 12

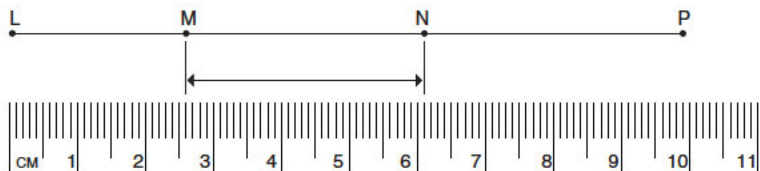5. How many axes of symmetry can be drawn on this diagram?

    (A) 1   (B) 2   (C) 4   (D) 8

6. If $7 \times \square = 707$ then $\square$ equals:

    (A) 11   (B) 101   (C) 539   (D) 4949

7. The 2000 Olympics conducted in Sydney was the 24th Summer Olympic Games to have been staged in the modern era.
    If future Summer Olympic Games are to be staged in leap years, the Games staged in the year 2024 will be the:

    (A) 29 th Summer Olympics.

    (B) 30 th Summer Olympics.

    (C) 47 th Summer Olympics.

    (D) 48 th Summer Olympics.

8. Separate 1 cm³ blocks have been glued together to build the solid rectangular prism shown. How many 1cm³ blocks are there in this prism?
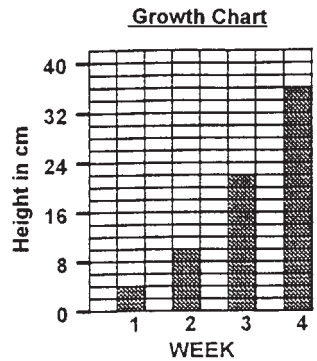
(A) 47　　　　　(B) 60　　　　　　　　(C) 74　　　　(D) 94

9. The diagram shows how a centimetre rule is used to measure the length of LP. How long is the interval MN?

L　　　　　　M　　　　　　　　N　　　　　　　　P

CM　1　　2　　3　　4　　5　　6　　7　　8　　9　　10　　11

(A) 35 mm　　　(B) 35 cm　　　(C) 0.35 m　　(D) 3.5 mm

10. ⚫ represents 36 pies.

How many pies would ⚫⚫⚫⚫◖ represent?

(A) 4.5　　　　　(B) 45　　　　　　　　(C) 144.5　　(D) 162

11. Erica has $1.70 and Jose has $1.50. They share equally the cost of buying a yo-yo which costs $2.80. How much money would Erica have after they bought the yo-yo?

(A) $0.30　　　　(B) $1.10　　　(C) $1.30　　　(D) $1.40

12. Which one of the following does **NOT** equal 412 354?

(A) 400 000 + 10 000 + 2 000 + 300 + 50 + 4
(B) 400 000 + 12 000 + 300 + 54
(C) 410 000 + 20 000 + 350 + 4
(D) 412 000 + 300 + 50 + 4

13. Joel planted a seedling and measured its height at the end of each week for the first four weeks of its growth. He recorded his results using the graph shown. How much did the plant grow during the fourth week?

(A) 36 cm
(B) 22 cm
(C) 14 cm
(D) 7 cm

Growth Chart

14. Yesterday morning, a reliable digital clock showed that it was **"twenty - five minutes past ten".** What time did that clock show **fifty minutes** later?

(A) 9:35 a.m.   (B) 10:35 a.m.   (C) 10:40 a.m.   (D) 11:15 a.m.

15. The difference between two numbers greater than zero is 627. If one of these numbers is 498, then the other number is:

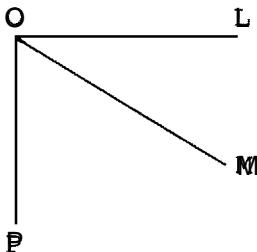(A) 129   (B) 139   (C) 1115   (D) 1125

SECTION B

Each question in this section is worth 3 marks.

16. Peter, Paul and Mary live in separate houses on the same side of a country road which runs due north. Mary's house is 22 km north of Peter's and is 14 km south of Paul's. Which one of the following statements is **FALSE?**

(A) Paul's house is 14 km north of Mary's.
(B) Peter's house is 36 km south of Paul's.
(C) Peter's house is 22 km south of Mary's.
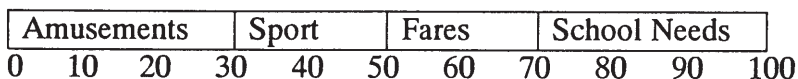(D) Paul's house is 8 km south of Mary's.

17.

The angle LOP is a right angle.
The angle LOM is half the angle MOP.
Which one of the following is **TRUE?**

(A) The angle LOM = 30^0
(B) The angle LOM = 40^0
(C) The angle LOM = 45^0
(D) The angle LOM = 60^0

18. The table shows the **maximum daily temperature** readings for a school week. What was the **average maximum daily temperature** for that school week?

DAY	MAXIMUM TEMPERATURE
MONDAY	23°C
TUESDAY	25°C
WEDNESDAY	20°C
THURSDAY	19°C
FRIDAY	24°C

(A) 22.1°C   (B) 22.2 °C   (C) 23°C   (D) 25°C

19. Which one of the following is **TRUE?**

(A) 1 ha $= 100 \text{ m}^2$
(B) 420 cm = 42 m
(C) 87 mL = 8.7 L
(D) 0.4 kg = 400 g

20. Guy has $15.00 to buy five drinks and eight packets of chips. If drinks cost $1.20 each, and he receives $2.20 change, how much does each packet of chips cost?

(A) $11.60   (B) $6.80   (C) $1.36   (D) $0.85

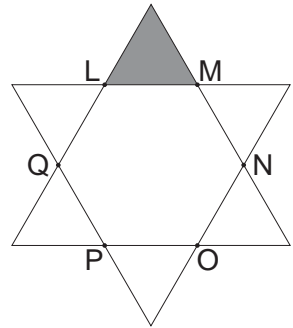21. Toula uses this bar graph to show how she spends her weekly pocket money.

Amusements	Sport	Fares	School Needs
0 10 20	30 40	50 60	70 80 90 100

If Toula earns $15.00 each week in pocket money, how much more does she spend on **"amusements"** than on **"fares"**?

(A) $1.50   (B) $3.00   (C) $4.50   (D) $7.50

22. Which one of the following is **NOT** the same as 2%?

(A) 0.2   (B)   (C)   (D)

23. What is the sum of the digits of the largest four digit number which has a factor of 7?

(A) 28   (B) 33   (C) 35   (D) 36

24. Which group of angles would be the three angles of an **acute angled, isosceles triangle**?

(A) 45°, 45°, 90°

(B) 45°, 65°, 70°

(C) 50°, 65°, 65°

(D) 20°, 20°, 140°

25. The diagram shows how a regular hexagon can be formed when two large identical equilateral triangles are overlapped.
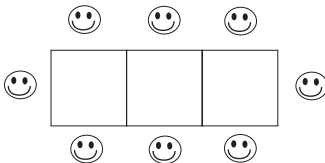
If the small shaded equilateral triangle has an area of 4 cm^2, what would be the area of the regular hexagon LMNOPQ?

(A) 16 cm^2 (B) 20 cm^2 (C) 24 cm^2 (D) 48 cm^2

SECTION C

Each question in this section is worth 4 marks.

26. The diagram shows how 8 people can be seated at a row of 3 square tables which have been placed side by side. Only one person is allowed to sit along each side of a table.

Note: ☺ represents a seated person.

How many people could be seated at a row of 100 tables when placed side by side?

(A) 102   (B) 198   (C) 200   (D) 202

27. A very fast train travelling at 360 km/h will travel how far in 1 second?

(A) 10 m   (B) 60 m   (C) 100 m   (D) 600 m

28. In 1999, Ian Thorpe broke the world record for 200 metres freestyle by swimming a time of 1 minute 46.00 seconds. He swam the first 100 metres in 55.01 seconds. How long did it take him to swim the second 100 metres?

(A) 51.99 seconds
(B) 50.59 seconds
(C) 50.99 seconds
(D) 1 minute 30.99 seconds

29. An example of a sequence of eight consecutive natural numbers is:

   3, 4, 5, 6, 7, 8, 9, 10.

Which one of the following statements is **FALSE**?

(A) The sum of four consecutive natural numbers is even.
(B) The product of four consecutive natural numbers is even.
(C) The sum of three consecutive natural numbers is either odd or even.
(D) The product of three consecutive natural numbers is odd.

30. There are 28 handshakes at a party. Each person at that party shook hands with everyone else once. How many were at that party?
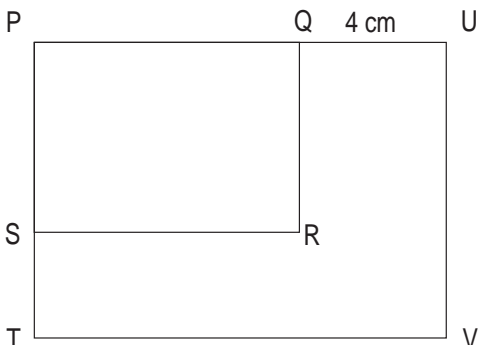
(A) 7   (B) 8   (C) 10   (D) 14

31. The length and width of the rectangle PUVT are half as long again as the length and width of the rectangle PQRS.

QU = 4 cm

Area of rectangle PQRS = 48 cm^2

What is the perimeter of the rectangle PUVT?

(A) 28 cm   (B) 36 cm   (C) 42 cm   (D) 108 cm

32. The first two digit square number is 16. There are six square numbers that have two digits. How many square numbers have three digits?

(A) 21   (B) 22   (C) 31   (D) 84

33. How many ways can 10 counters be put into three piles so that each pile has at least one counter and no two piles have the same number of counters?

Note that a re-ordering of any group of three piles does not make a new three pile arrangement.

(A) 4　　　　　(B) 6　　　　(C) 8　　　　(D) 9

34. It costs $3.00 for 250 g of lawn seed. If 1 kg of lawn seed is needed to plant an area of 6 square metres, then it will cost $40.50 to buy lawn seed to plant a square lawn of side:

(A) 4.5 m　　　(B) 5.5 m　　(C) 6.5 m　　(D) 8.5 m

35. In the incomplete magic square below, the number in the centre box is represented by △ . The sum of each column and the sum of each row equals 5 x△ . What is the number represented by ★ in the bottom left hand corner of this magic square?

		3		
		21		
		△		
		57		
★	54	75	6	27

(A) 18　　　　(B) 33　　　　　　(C) 39　　　　(D) 48

END OF EXAMINATION