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**THE HUNTER
PRIMARY MATHEMATICS COMPETITION**

Wednesday, 5th September, 2001

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.
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. What is the next number in this pattern?

5, 12, 19, 26, 33, .

(A) 35 (B) 40 (C) 42 (D) 47

2.
$$\begin{array}{r} 327 \\ 84 \\ 58 \\ + \underline{163} \\ \hline \end{array}$$

The answer is:

(A) 432 (B) 612 (C) 622 (D) 632

3.
$$\begin{array}{r} 5015 \\ - \underline{2923} \\ \hline \end{array}$$

The answer is:

(A) 2092 (B) 2112 (C) 2192 (D) 7938

4. What is the perimeter of a square with side 8 cm?

(A) 2 cm (B) 16 cm (C) 32 cm (D) 64 cm

5.
$$\begin{array}{r} 630 \\ \times \underline{40} \\ \hline \end{array}$$

The answer is:

(A) 2 520 (B) 24 120 (C) 24 200 (D) 25 200

6. $2114 \div 2 = ?$ The answer is:

(A) 1002 (B) 1007 (C) 1052 (D) 1057

7. How many edges does a triangular prism have?

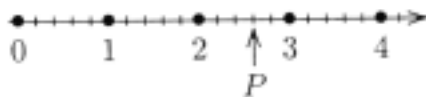
(A) 5 (B) 6 (C) 8 (D) 9

8. Which decimal represents the largest number?
 (A) 3.1 (B) 3.09 (C) 3.99 (D) 3.099
9. Thirty-four tens could also be written as:
 (A) 3 hundreds + 4 tens
 (B) 3 hundreds + 40 tens
 (C) 30 tens + 4 ones
 (D) 3 tens + 40 ones
10. What is the cost of 750 g of potatoes if 1 kg cost \$1.20?
 (A) 80 cents (B) 90 cents (C) \$1.60 (D) \$3.60
11. How many axes of symmetry can be drawn on this diagram?



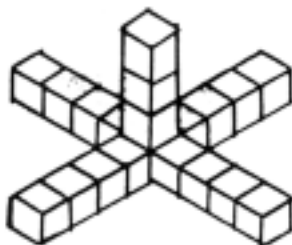
- (A) 0 (B) 1 (C) 2 (D) 3

12.



The point P on the above number line represents:

- (A) 2.03 (B) 2.3 (C) 2.6 (D) 2.75
13. The square faces of separate 1 cm^3 blocks have been glued together to build the model shown. How many 1 cm^3 blocks are there in this model?



- (A) 19 (B) 20 (C) 21 (D) 23

14. Dimitri will commence his holidays on Wednesday, 24 July, 2002. He will return to work on 19 August, 2002. What day of the week will he return to work?
- (A) Monday (B) Tuesday (C) Thursday (D) Friday
15. Which one of the following does NOT equal four fifths?
- (A) $\frac{4}{5}$ (B) 0.08 (C) 80% (D) one fifth of 4

SECTION B

Each question in this section is worth 3 marks.

16. What time would be shown on a 24 hour digital clock at "thirteen minutes to midnight?"
- (A) 00:13 (B) 11:47 (C) 23:47 (D) 24:13
17. A regular polygon has all sides equal and all angles equal. Which one of the following shapes is always regular?
- (A) equilateral triangle
(B) right-angled triangle
(C) obtuse-angled triangle
(D) rhombus
18. When dividing 4387 by 25 the remainder is :
- (A) 7 (B) 12 (C) 17 (D) 37
19. A train from Newcastle arrived in Sydney at 11:08 a.m. It took 2 hours 57 minutes to complete its journey. At what time did it commence its journey?
- (A) 8:05 a.m. (B) 8:11 a.m. (C) 8:51 a.m. (D) 2:05 p.m.

20. To best estimate the temperature at 11:30 a.m., which graph should be drawn to represent the information given in the "Temperature Chart"?

- (A) Line Graph
(B) Bar Graph
(C) Column Graph
(D) Pie Graph

Time	Temperature
9 a.m.	14 °C
10 a.m.	15 °C
11 a.m.	18 °C
12 noon	22 °C
1 p.m.	26 °C

21. In a triangle, the smallest angle is one third the largest angle and half the other angle. What is the size of the smallest angle in this triangle?
- (A) 10° (B) 20° (C) 25° (D) 30°
22. The price of a shirt after adding the 10% GST charge was \$55.00. What would be the price of this shirt before the GST was added?
- (A) \$60.50 (B) \$60.00 (C) \$50.00 (D) \$49.50
23. The table shows the number of test matches won, lost, drawn or tied when Sir Donald Bradman captained the Australian cricket team.

Won	Lost	Drawn	Tied
15	3	6	0

What percentage of matches was won when Sir Donald Bradman captained the team?

- (A) 15% (B) 24% (C) 60% (D) 62.5%

24. The date 280201 represents 28 February, 2001. Entries in the Balance column for the dates 310501, 300601 and 310701 did not print in Lisa's Newcastle Permanent Savings Passbook. What balance should have been shown for 31 July, 2001?

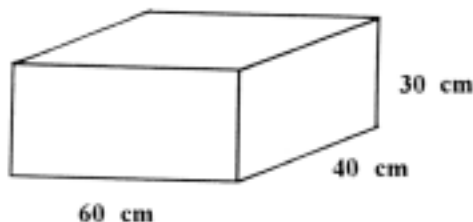
DATE	DEPOSIT	WITHDRAWAL	BALANCE
280201			\$640.75
310301	\$15.50		\$656.25
300401		\$23.00	\$633.25
310501		\$ 7.80	
300601	\$18.95		
310701		\$ 9.20	
310801	\$11.50		\$646.70

- (A) \$621.40 (B) \$635.20 (C) \$655.90 (D) \$658.20
25. A rectangular mat is 7 mm longer than its width. How wide is this mat if its length is 1.4 m?
- (A) 0.7 m (B) 133 cm (C) 139.3 cm (D) 147 cm

SECTION C

Each question in this section is worth 4 marks.

26. This tank's measurements are shown on the diagram.



How many litres of water would this tank hold when full?

- (A) 72 L (B) 720 L (C) 7 200 L (D) 72 000 L

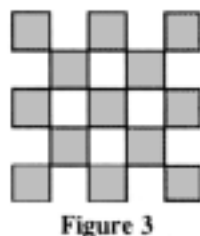
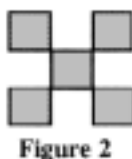
27. A rectangular paddock is 75 metres wide. Its area is 3.75 ha. What is the length of this paddock?
- (A) 5 m (B) 50 m (C) 500 m (D) 5000 m
28. $2^{10} = 1024$. Which one of the following statements is correct?
- (A) $1\ 000\ 000 = 1000 \times 2^{10}$ to the nearest hundred
- (B) $1\ 000\ 000 = 1000 \times 2^{10}$ to the nearest thousand
- (C) $1\ 000\ 000 = 1000 \times 2^{10}$ to the nearest ten thousand
- (D) $1\ 000\ 000 = 1000 \times 2^{10}$ to the nearest hundred thousand
29. A box holds red and blue disks. A number is written on each disk. The total of the numbers on these disks is 60. The average of the numbers on the 6 red disks is 4. The average of the numbers on the blue disks is 9. How many blue disks are there in the box?
- (A) 4 (B) 5 (C) 6 (D) 10
30. A cyclist travelled at 20 km/h for 40 km. This cyclist then travelled at 40 km/h for the next 20 km. The cyclist's average speed for the total journey was:
- (A) 20 km/h (B) 24 km/h (C) 30 km/h (D) 34 km/h
31. Ten children each donate a different amount to a charity. The least of these amounts is \$12.85 and the greatest is \$13.45. One of the following amounts is the sum of their ten donations. Which of the following must be that amount?
- (A) \$125.60 (B) \$128.50 (C) \$131.60 (D) \$135.

TURN OVER THE PAGE FOR QUESTIONS 32 TO 35.

32. An example of seven consecutive natural numbers is 3, 4, 5, 6, 7, 8 and 9. The sum of the consecutive natural numbers starting at 31 and finishing at 76 is:

(A) 2441 (B) 2451 (C) 2461 (D) 2471

33. If the pattern shown in Figures 1, 2 and 3 was extended to show Figures 4 and 5, how many shaded squares would there be in Figure 5?

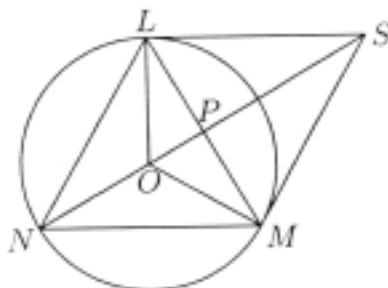


(A) 39 (B) 41 (C) 43 (D) 45

34. The points L, M and N are on the circumference of the circle with centre O. LMN is an equilateral triangle. LM and NS, the diagonals of the rhombus LSMN, intersect at P.

The area of the triangle LPO is 6 cm^2 .

What is the area of the triangle LSP?



(A) 12 cm^2 (B) 15 cm^2 (C) 18 cm^2 (D) 24 cm^2

35. $12 \times 13 \times 14 \times 15 \times 16$ equals:

(A) 524 160 (B) 524 320 (C) 524 340 (D) 524 460

END OF EXAMINATION