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**THE HUNTER
PRIMARY MATHEMATICS COMPETITION**

Wednesday, 4th September, 2002

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.
3. Working paper will be supplied by your teacher if required. **NO** working is to be shown on your answer sheet.
4. All answers **MUST** be recorded in **PENCIL** on your answer sheet.
5. When your teacher gives the signal, begin working on the problems. You have 45 minutes working time.
6. 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?

43, 39, 35, 31, 27, 2

- (A) 23 (B) 25 (C) 29 (D) 31

2.
$$\begin{array}{r} 6002 \\ - 2499 \\ \hline \end{array}$$

The answer is:

- (A) 3503 (B) 3603 (C) 3613 (D) 4497

3.
$$\begin{array}{r} 507 \\ \times \quad 4 \\ \hline \end{array}$$

The answer is:

- (A) 208 (B) 228 (C) 2028 (D) 2208

4. What would a digital clock show at "25 minutes to 11" in the morning?

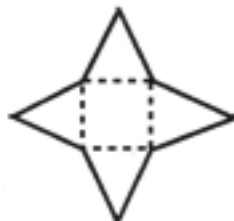
- (A) 10:25 (B) 10:35 (C) 10:45 (D) 11:25

5. If the numbers 3099, 3682, 2501, and 3657 were ordered from smallest to largest, the third number would be:

- (A) 2501 (B) 3682 (C) 3099 (D) 3657

6. What 3D object could be built from the net shown?

- (A) triangular prism
(B) triangular pyramid
(C) square prism
(D) square pyramid



7. When written in words, 10 800 is:

- (A) ten thousand and eighty
(B) one thousand, eight hundred
(C) ten thousand, eight hundred
(D) one hundred and eight thousand

8. Tiu bought 6 bags of lollies at \$1.72 each. How much change would she get from \$15.00, after her bill was rounded to the nearest 5 cents?

(A) \$4.65 (B) \$4.70 (C) \$5.30 (D) \$10.30

9.  represents 2500.

How much would  represent?

(A) 3250 (B) 3500 (C) 3750 (D) 4000

10. What digit does ★ stand for in this algorithm?

$$\begin{array}{r} 157r2 \\ 6 \overline{) 94\star} \end{array}$$

(A) 4 (B) 5 (C) 6 (D) 7

11. Tim will be fifteen on the 25th November, 2002. On which of the following dates was Tim born?

(A) 25/11/1986 (B) 25/11/1987 (C) 25/11/1988 (D) 25/11/2002

12. How much orange juice would be needed to fill four 375 mL bottles?

(A) 150 mL (B) 0.15 L (C) 1.5 L (D) 15 L

13. After sharing them equally with her three friends, Jane had 360 g of lollies. Before sharing Jane had:

(A) 90 g of lollies

(B) 120 g of lollies

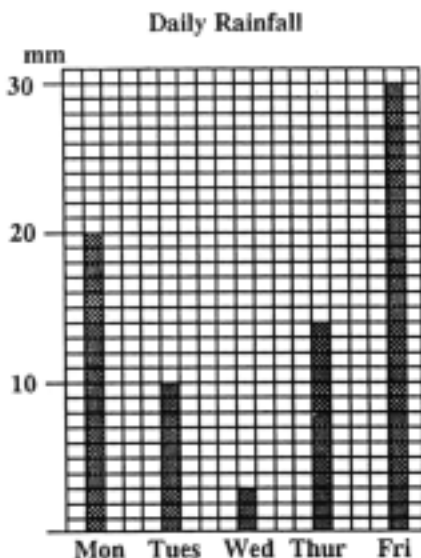
(C) 1.08 kg of lollies

(D) 1.44 kg of lollies

14. This column graph shows the daily rainfall for a school week.

Which one of the following is FALSE?

- (A) The wettest day was Friday.
 (B) Thursday had 14 mm of rain.
 (C) Wednesday had the least rain.
 (D) Monday had half as much rain as Tuesday.



15. Which one of the following is the largest decimal?

- (A) 8.1 (B) 8.01 (C) 8.001 (D) 8.011

SECTION B

Each question in this section is worth 3 marks.

16. XL is 32 mm, LM is 23 mm and MN is 38 mm. How long is XN?



- (A) 0.93 cm (B) 9.03 cm (C) 9.3 cm (D) 93 cm
17. Two angles of a triangle are 23° and 37° . What is the size of the third angle?
- (A) 30° (B) 60° (C) 90° (D) 120°
18. If $\square \div 8 = 0.25$ then \square equals:
- (A) 1 (B) 2 (C) 10 (D) 32
19. Which of the following is the best estimate of the answer to $8.91 \times \frac{45}{41} = ?$
- (A) 0.1 (B) 1 (C) 10 (D) 100

SECTION C

Each question in this section is worth 4 marks.

26. At low tide, half a vertical pier is above the water level and at high tide, one third of the pier is above the water level. If the pier is 5.4 metres tall then the difference between the high and low tide levels is:

(A) 90 cm (B) 180 cm (C) 270 cm (D) 450 cm

27. The table shows the matches won, drawn and lost by the top eight teams which qualified to play in the finals of the 2001 National Rugby League Competition. Which team won more than 63% but less than 67% of the matches it played?

Team	Won	Drawn	Lost
Eels	20	2	4
Bulldogs	17	3	6
Knights	16	1	9
Sharks	15	2	9
Broncos	14	1	11
Roosters	13	1	12
Dragons	12	2	12
Warriors	12	2	12

- (A) Bulldogs
(B) Knights
(C) Sharks
(D) Broncos

28. In an election for School Captain, there were only two candidates. The winner received 60% of the votes cast and won by 90 votes. How many students voted?

(A) 150 (B) 225 (C) 450 (D) 900

29. What is the perimeter of this shape which has been made by placing six $6\text{ cm} \times 2\text{ cm}$ rectangles together as shown?



(A) 16 cm (B) 48 cm (C) 72 cm (D) 96 cm

30. When playing a game, Bob and Pam place 10 matches on a table. They then take it in turn to remove 1, 2, 3 or 4 matches. The winner is the player who removes the last 1, 2, 3 or 4 matches. Bob has the first turn and removes 4 matches. How many matches must Pam take at her first turn so that she is able to win the game when she has her second turn?

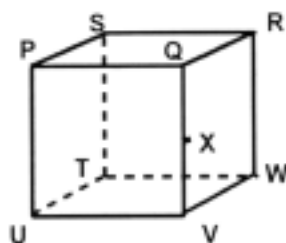
(A) 1 (B) 2 (C) 3 (D) 4

31. In each of the following, \square represents an odd number. Which of the following would always be a multiple of 6?
- (A) $(2 \times \square) + 3$
- (B) $(2 \times \square) + \square$
- (C) $(3 \times \square) + 3$
- (D) $(3 \times \square) + 2$
32. The average of five scores is 29 and a sixth score is 35. Which of the following would equal the average of all six scores?
- (A) $\frac{29 + 35}{2}$
- (B) $\frac{29 + 35}{6}$
- (C) $\frac{(5 \times 29) + 35}{2}$
- (D) $\frac{(5 \times 29) + 35}{6}$
33. A solid wooden cube, with 3 cm side lengths, is painted blue and then cut up into 27 small cubes, each with a side length of 1 cm. How many more small cubes with only two blue faces are there than small cubes with only one blue face?
- (A) 3 (B) 6 (C) 9 (D) 12
34. Which one of the following statements is TRUE?
- When rolling a cubical die with faces numbered 1 to 6, you would be:
- (A) less likely to roll a 6 than a 1
- (B) more likely to roll a number greater than 2 than a number less than 5
- (C) less likely to roll an odd number than an even number
- (D) more likely to roll a multiple of 2 than a multiple of 3

TURN OVER THE PAGE FOR QUESTION 35.

35. In the cube shown, X is the mid-point of QV. The triangle XWU is formed by joining XW, WU and UX. Triangle XWU is:

- (A) a right-angled isosceles triangle
- (B) an acute-angled isosceles triangle
- (C) an obtuse-angled isosceles triangle
- (D) a scalene triangle



END OF EXAMINATION