



Education



REVISION

**NEWCASTLE PERMANENT  
PRIMARY SCHOOL MATHEMATICS COMPETITION  
Monday 29 July – Friday 2 August 2024**

**Time allowed: 45 minutes.**

**Instructions:**

1. When asked by your teacher, open this booklet and check that there are 35 questions.
2. Calculators, electronic devices, rulers, geometrical instruments, or other aids are **NOT** permitted.
3. **NO** working is to be shown on your answer sheet. Working paper will be supplied by your teacher if required.
4. **All answers MUST be recorded in PENCIL on your answer sheet** (a B pencil or darker). Questions 1 to 32 are multiple choice. For questions 33 to 35 shade in the ovals to represent your answer, as explained on the answer sheet.
5. When your teacher gives the instruction, begin working on the problems. You have 45 minutes working time.
6. Marks will **NOT** be deducted for incorrect answers.
7. **Make sure that you complete the sections on the answer sheet for your name, division, school name and five-digit Mathematics Competition Code.**

**SECTION A**

**Each correct answer in this section is worth 2 marks.**

1.  $215 - 114 =$   
(A) 101 (B) 110 (C) 111 (D) 329
2. How many metres in  $2\frac{1}{2}$  kilometres?  
(A) 25 (B) 250 (C) 2500 (D) 25 000
3. Fifteen thousand and fifteen is:  
(A) 1515 (B) 15 015 (C) 15 105 (D) 150 015
4. Which one of these is an acute angle?  
(A)  $360^\circ$  (B)  $180^\circ$  (C)  $120^\circ$  (D)  $40^\circ$
5. How many sides does a hexagon have?  
(A) 8 (B) 6 (C) 4 (D) 3
6.  $659 \times 2 =$   
(A) 1208 (B) 1308 (C) 1318 (D) 13 018
7. Which one of these is **not** a factor of 150?  
(A) 3 (B) 5 (C) 15 (D) 20
8. Which one of these is **not** a square number?  
(A) 9 (B) 16 (C) 50 (D) 100
9. If you randomly chose one of the letters of the word PARCELS, what is the probability that it is a vowel (A, E, I, O, U) ?  
(A)  $\frac{1}{7}$  (B)  $\frac{2}{7}$  (C)  $\frac{2}{5}$  (D) 2

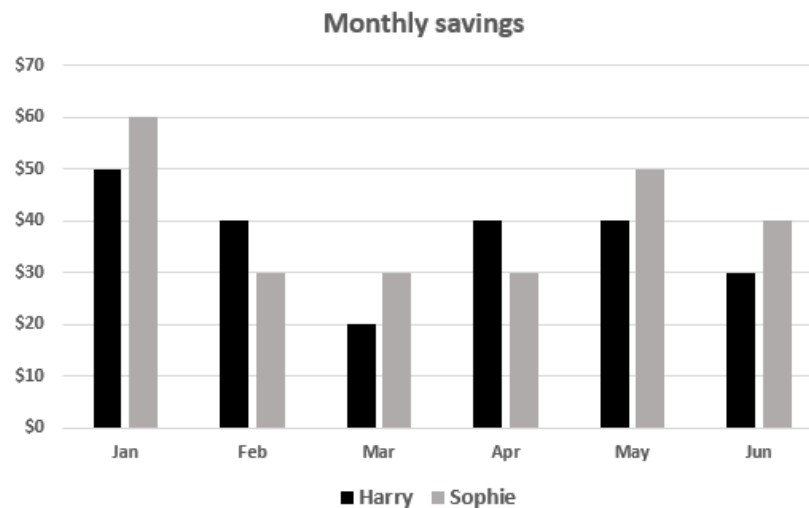
10. How many minutes in 25% of 1 hour?  
 (A) 15 (B) 25 (C) 30 (D) 60
11. Each calculator costs \$19.75. A school is going to buy 153 of these calculators. The best estimate for the total cost is:  
 (A) \$300 (B) \$350 (C) \$3000 (D) \$4000
12.  $2106 \div 6 =$   
 (A) 36 (B) 351 (C) 360 (D) 3501
13.  $1709 + 865 + 8275 =$   
 (A) 9849 (B) 10 749 (C) 10 839 (D) 10 849
14. When counting **down** by tens from 2015, the second number obtained is:  
 (A) 1005 (B) 1095 (C) 1990 (D) 1995
15. 27 is:  
 (A)  $1 + 13 \times 2$  (B) a prime number  
 (C) a square number (D) none of these

## SECTION B

Each correct answer in this section is worth 3 marks.

16. A chocolate bar has a weight of 250 grams. It can be separated into 20 identical pieces. The number of grams in each piece is:  
 (A) 12 (B) 12.5 (C) 20 (D) 25
17. At 9 p.m. the temperature was  $2^{\circ}\text{C}$ .  
 At midnight the temperature was  $-3^{\circ}\text{C}$ .  
 In those 3 hours the temperature had:  
 (A) decreased by  $5^{\circ}\text{C}$  (B) decreased by  $1^{\circ}\text{C}$   
 (C) increased by  $1^{\circ}\text{C}$  (D) decreased by  $6^{\circ}\text{C}$

18.



The graph shows the amount saved by Harry and Sophie in each month from January to June.

Which statement is true?

- (A) In total, Harry saved more than Sophie  
 (B) Harry saved less than \$200  
 (C) Sophie saved a total of \$220  
 (D) Sophie was the better saver in 4 of the months
19. \$217 is to be shared equally between 5 people. How much does each person receive?  
 (A) \$43.50 (B) \$43.40 (C) \$43.20 (D) \$43.05
20. Which is the smallest?  
 (A)  $\frac{3}{4}$  (B) 0.5 (C)  $\frac{3}{8}$  (D)  $\frac{7}{10}$

21. A rectangular prism is 10 cm in high and has a volume of  $400 \text{ cm}^3$ .  
The length is 3 cm more than the width.  
What is the length in cm?  
(A) 4 (B) 5 (C) 8 (D) 10
22. A quadrilateral which has 4 lines of symmetry is a:  
(A) square (B) parallelogram  
(C) trapezium (D) rectangle
23. The owner of a fruit shop bought a box of pineapples. On Monday she sold 10 of the pineapples, on Tuesday she sold half of the remaining pineapples, on Wednesday she sold 6, and on Thursday she sold the last 8 pineapples.  
How many pineapples were originally in the box?  
(A) 20 (B) 29 (C) 34 (D) 38
24. How many centimetres in  $\frac{1}{5}$  of 2.8 metres?  
(A) 5.6 (B) 56 (C) 506 (D) 560
25. What percentage is 250 grams of  $\frac{1}{2}$  kilogram?  
(A) 20% (B) 25% (C) 50% (D) 75%

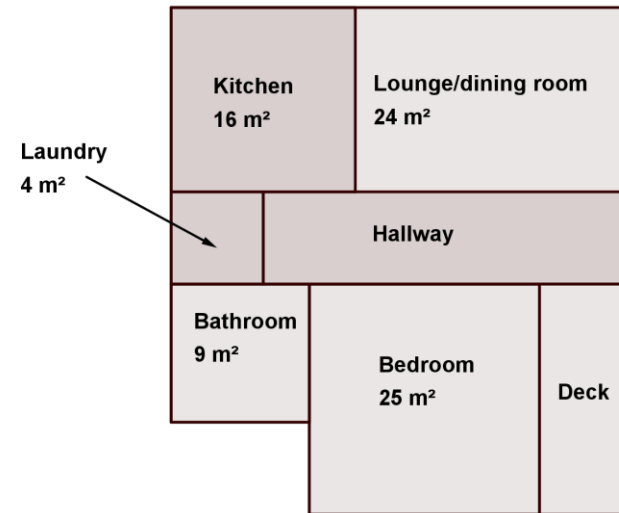
### SECTION C

Each correct answer in this section is worth 4 marks.

26. Four friends each have a model boat.  
Aaron's boat travels 75 metres in 45 seconds.  
Belinda's boat travels 18 metres in 12 seconds.  
Clare's boat travels 23 metres in 15 seconds.  
Dimitri's boat travels 16 metres in 10 seconds.  
Who has the fastest boat?  
(A) Aaron (B) Belinda (C) Clare (D) Dimitri

27. Eva's times for her last 3 Park Runs are:  
31 minutes and 42 seconds  
33 minutes and 51 seconds  
31 minutes and 54 seconds.  
What is her average time for the last 3 runs?  
(A) 32 minutes and 29 seconds  
(B) 32 minutes and 49 seconds  
(C) 31 minutes and 29 seconds  
(D) 31 minutes and 49 seconds

28.



In the house plan shown above, the kitchen, laundry, bathroom, and bedroom are square shaped rooms.

What is the total area of the house?

- (A)  $78 \text{ m}^2$  (B)  $90 \text{ m}^2$  (C)  $104 \text{ m}^2$  (D)  $110 \text{ m}^2$
29.  $2\frac{5}{8} + 1.5 =$   
(A)  $1\frac{1}{8}$  (B)  $3\frac{1}{8}$  (C)  $4\frac{1}{8}$  (D)  $4\frac{1}{4}$

30. This incomplete table shows the percentage of boys and the percentage of girls who chose each sport as their favourite.

Sport	Boys	Girls
Swimming	50%	40%
Tennis	10%	35%
Football		

There were 60 boys and 64 girls in the group.

How many of the group chose football as their favourite?

- (A) 24      (B) 40      (C) 60      (D) 65
31. 737 is an example of a 3-digit palindromic number (it is the same number if you reverse the digits). How many 3-digit palindromic numbers are divisible by 6 ?
- (A) 18      (B) 13      (C) 12      (D) 6
32. A water tank was 70% full. After 600 litres was used the tank was 30% full. How many litres could the tank hold when completely full?
- (A) 6000      (B) 4200      (C) 2000      (D) 1500

**Questions 33, 34 and 35 are not multiple choice.**

**On the Answer Sheet shade in the ovals to represent your answer.**

**Only give the number value of the answer, don't include any units of measurement such as degrees or minutes.**

33. 40 is the highest common factor (HCF) of 120 and another number, which we will call N.  
The lowest common multiple (LCM) of 120 and N is 600.  
What is the value of N?

34. Sylvie and Ella meet at the starting point of a cycling/walking track. The track forms a circle, and each circuit of the track is 7 kilometres. They decide to go in **opposite directions**.  
Sylvie rides at 24 km/h while Ella walks at 6 km/h.  
They continue to do this until Ella stops after 72 minutes but Sylvie continues riding.  
How many minutes will it take for Sylvie to arrive at Ella's location?
35. How many degrees are in the obtuse angle between the hands on a clockface when the clock is showing exactly 8:24 ?

**THERE ARE NO MORE QUESTIONS.**