NEWCASTLE PERMANENT

REVISION

NEWCASTLE PERMANENT
PRIMARY SCHOOL MATHEMATICS COMPETITION
Monday 28 July – Friday 1 August 2025

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. 222 – 111 =

   (A) 100 (B) 110 (C) 111 (D) 121

2. A hexagon has how many sides?

   (A) 5 (B) 6 (C) 7 (D) 9

3. How many millimetres in 2.1 metres?

   (A) 210 (B) 210.1 (C) 2010 (D) 2100

4. 621 x 20 =

   (A) 1242 (B) 12 402 (C) 12 420 (D) 12 422

5. Which one of the following is **not** a factor of 200?

   (A) 2 (B) 25 (C) 60 (D) 100

6. How many faces does a triangular-based pyramid have?

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

7. The number of grams in 0.65 kilograms is:

   (A) 6.5 (B) 65 (C) 650 (D) 6500

8. 2 + 6 x 3 =

   (A) 12 (B) 20 (C) 24 (D) 36

9. 25 students each vote for only one of three sport options (Soccer, Cricket, Volleyball) for their class to play. If 12 vote for Soccer, and 7 for Cricket, then what percentage of the class **don't** vote for Soccer or Cricket?

   (A) 24% (B) 25% (C) 28% (D) 48%

10. Sixty-two thousand and sixty is:

(A) 6260 (B) 60 260 (C) 62 060 (D) 62 600

11. What is the sum of 0.45 and $\frac{2}{5}$?

(A) 0.47 (B) 0.65 (C) 0.8 (D) 0.85

12. 12.2061 rounded to the nearest tenth is:

(A) 12.2 (B) 12.21 (C) 12.3 (D) 12.6

13. How many minutes are there from 11:54am to 12:05pm?

(A) 11 (B) 19 (C) 71 (D) 731

14. Emma walks 1.2km in 15 minutes. This is equivalent to what speed in kilometres per hour?

(A) 1.2 (B) 2.4 (C) 4.8 (D) 15

15. Sally buys 7 of the same type of ice creams and receives $38.80 change when paying with a $50 note. What was the price per ice cream?

(A) $1.60 (B) $1.65 (C) $1.80 (D) $1.85

SECTION B
Each correct answer in this section is worth 3 marks.

16. The perimeter of an isosceles triangle is 2.8 metres. Just one side is 1m in length. The lengths, in metres, of each of the other two sides are:

(A) 0.85 and 0.95
(B) 0.9 and 0.9
(C) 0.8 and 1
(D) (A), (B) or (C) could all be true

17. What is the answer to 5454 divided by 27?

(A) 202 (B) 220 (C) 222 (D) 2222

18. Which is closest to 4.197?

(A) 4 (B) $\frac{21}{5}$ (C) 4.21 (D) $\frac{22}{5}$

19. What is the lowest common multiple of 12 and 16?

(A) 2 (B) 32 (C) 48 (D) 192

20. Over the past four 200m races, Sawyer's average time has been 29.5 seconds. If three of his four times were 30 seconds, 29.4 seconds, and 29.6 seconds, then his fourth time, in seconds, must have been:

(A) 29 (B) 29.1 (C) 29.5 (D) 29.6

21. Which is most likely to have a mass nearest 150g?

(A) Half a Litre of water (B) USB stick (flash drive)
(C) Five $1 coins (D) Three fresh eggs

22. A particular brand of Camembert cheese has 240mg of Calcium per 60g. A particular brand of Cheddar cheese has 780mg of Calcium per 100g. In pieces of equal weight, the amount of Calcium in the Cheddar cheese piece would be how many times the amount of Calcium in the Camembert cheese piece?

(A) 1.9 (B) 1.95 (C) 2 (D) 3.25

23. Which of the following could be the answer to the multiplication of two 3-digit numbers where the last two digits of one number are 29 and the last two digits of the second number are 19?

(A) 28 252 (B) 282 523 (C) 302 351 (D) 427 477

24. A 1.5kg packet of lollies is to be divided amongst the top three people (1st, 2nd and 3rd) in a competition, such that the person in 1st receives 65% of the lollies, by weight.
The weight of lollies received by the person in 1st would be nearest to:

(A) 0.65kg (B) 0.8kg (C) 1kg (D) 1.2kg

25. Petrol at a particular petrol station costs 171.7 cents per Litre. What would be the cost in dollars ($) for 30 Litres?

(A) 51.50 (B) 51.51 (C) 51.52 (D) 51.53

SECTION C
Each correct answer in this section is worth 4 marks.

26. Jack gets a 25% rise in his hourly pay rate. After working for 4 hours at his new (after the 25% rise) hourly pay rate he receives $250.
What was his hourly pay rate, in $ per hour (rounded to the nearest cent), **before** the 25% rise?

(A) 46.88 (B) 50.00 (C) 50.50 (D) 62.50

27. What is the product of 1.2 and 1.2?

(A) 1.2 (B) 1.21 (C) 1.32 (D) 1.44

28. A turtle is lying on the beach. If the turtle travels forward 3 metres, then turns on the spot 90 degrees and travels forward 4 metres, then the turtle is how many metres directly from its starting point?

(A) 3.4 (B) 4.7 (C) 5 (D) 7

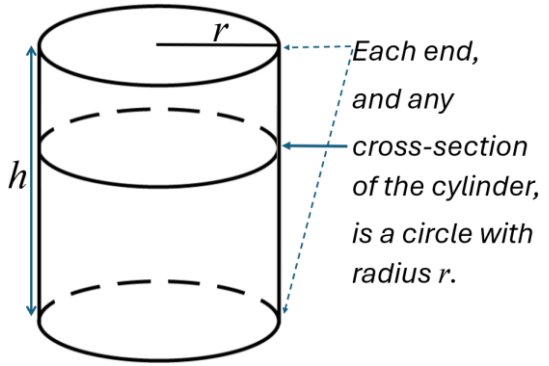
29. During a 20-hour expedition in the wilderness, a scientist observes 32 different trees containing at least one green tree frog. The scientist tags each tree to prevent double-counting of trees. On average, a tree containing at least one green tree frog was observed once every how many minutes?

(A) 32.5 (B) 35.6 (C) 37.5 (D) 96

30. If $a = -2$, then what does $(a - 7) \times (a + 2)$ equal?

(A) -2 (B) -9 (C) -5 (D) 0

31. A cylinder is a geometric solid like a drinking straw, tin of baked beans or piece of plumbing pipe which has a circular cross-section. The diagram below shows a cylinder with radius r and height h.



The formula for calculating the volume of the cylinder would be:

(A) 2 x Area of circle x h
(B) h x Area of circle
(C) 2 x Area of circle divided by h
(D) r x h x $2r$

32. A particular lawn mowing machine (lawn mower) uses 2mL of petrol per square metre of grass mown. A rectangular yard, which is 39m by 22m, has a triangular concrete patch in the middle – the remainder of the yard is grass. The concrete patch is in the shape of a right-angled triangle, having sides of lengths 8m, 12m and 14.42m (rounded to two decimal places).

How many Litres of petrol would be used to mow the grass section of the yard

(A) 0.8 (B) 1.62 (C) 1.668 (D) 8.1

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. In a particular town, the probability that a person selected at random owns:

- both a car and a house is 0.1 (or 10%)
- a car (with or without a house) is 0.6 (or 60%)
- a house (with or without a car) is 0.25 (or 25%)

What is the probability that a person selected at random from the town owns a car or a house? Provide your answer as a percentage. E.g., if you believe the answer is 0.05, or 5%, then you would enter 5.

34. If both of the following equations are true,

$2a + b = 417.5$
$b - a = 50$

then what does a plus b equal?

35. There are two possible values of y such that

$y^2 - 37y + 210 = 0$

What is the larger of the two possible values for y?

THERE ARE NO MORE QUESTIONS.