Paper A. 2015

Numeracy Paper11+

Name	 ••••••	•••••
Candidate Number	 	
Seat Number		

This is a multiple-choice test.

Please fill in the details on the multiple-choice answer sheet.

This numeracy paper contains 45 questions, which you have 40 minutes to complete.

Clearly fill in the answers on the multiple-choice answer sheet. Erase any mistakes.

For working out, you can use this paper or the rough paper supplied.

ElevenPlusMock.org.uk

- Q1. What is 354 + 5567? Choose one answer from the answer sheet.
- **Q2**. What is 7.53 5.38?
- Q3. What is 6,000,006 in words?
- **Q4**. What is the value of 9 in 3.2095?
- **Q5**. What is $\frac{3}{5} \times \frac{1}{7}$?
- **Q6.** What is $\frac{3}{4} \div \frac{1}{2}$?

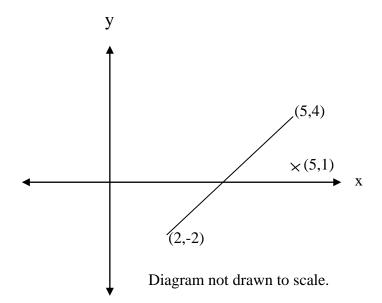
The following table displays the maximum temperature for each day in the $1^{\rm st}$ week of December in Ryde.

Day of the week	Maximum temperature in °C
Monday	4.2
Tuesday	-0.1
Wednesday	1.6
Thursday	2.3
Friday	-0.6
Saturday	-1.1
Sunday	2.1

- Q7. What is the difference in temperature between Monday and Saturday?
- Q8. What day has the median temperature?
- Q9. What is the average temperature?
- Q10. How many hours are there between 10 a.m. on the 28th October and 3 a.m. on the 2nd November?
- Q11. What is the probability of picking a red ball from a bag which contains 6 reds, 3 blues and 1 green?

 (Write this down as a fraction in its simplest term.)

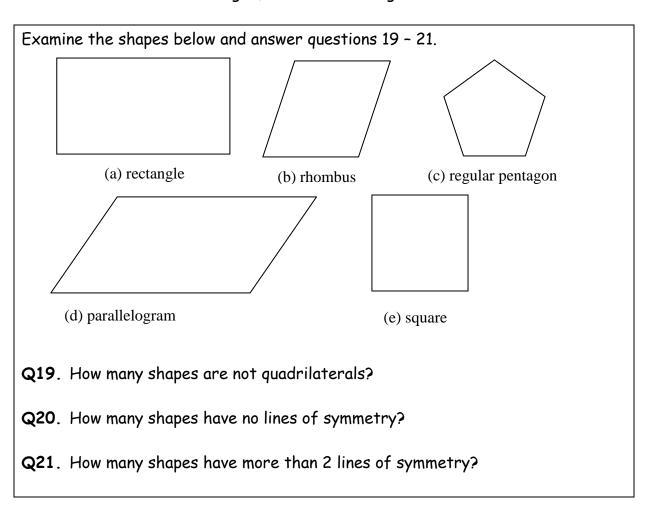
Q12. A dot at (0,0) on a computer game has to be directed to a cross at (5,1) by the shortest distance without crossing or touching the diagonal line which runs from (2,-2) to (5,4).



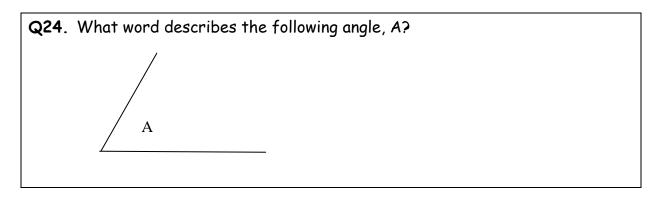
The dot can only move a whole number of squares either vertically or horizontally at any time. Work out which one of the following is the best answer and mark it on the answer sheet.

- A 1 up, then 5 right.
- B 4 up, 5 right, then 3 down.
- C 5 up, 6 right, 4 down, then 1 left.
- **D** 3 down, 5 right, 4 up.
- E More than 1 of the above answers will permit the dot to reach its target.
- Q13. What is 40% of 20?
- Q14. What is the price of a jumper if it goes up 15% in price from £20?
- Q15. What was the original price of a suit if the price, after a 25% increase, is £100?
- Q16. Tom is twice the age of Amy and she is 1 year older than Ben. Tom is three years older than Ben. How old is Amy?
- Q17. What number has your friend thought of if he trebles it, and trebles that answer to make 36? (Treble means multiply by 3.)

Q18. What can you do to any starting number you think of, that will have the same result as trebling it, and then trebling that answer?



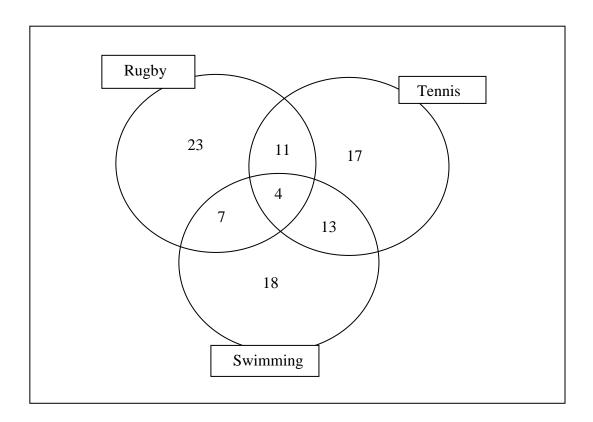
- Q22. What is 6.25 kilograms to the nearest 100 grams?
- Q23. What is 3.278 kilometres to the nearest centimetre?



Q25. Find the set of numbers on the answer sheet that are all multiples of 7.

Q26. A group of children were asked which sports they enjoy. The results were put in the following Venn diagram.

How many children included tennis and swimming in the list of sports they enjoy?



Q27. Which of the following numbers is closest to 0? 1.1, 0.8, -0.0891, -0.089 or 0.79

Q28. If y = 2y - 6, what is y?

Q29. The perimeter of the rectangle is 28m. One of the short sides is 5m. What does a longer side measure?

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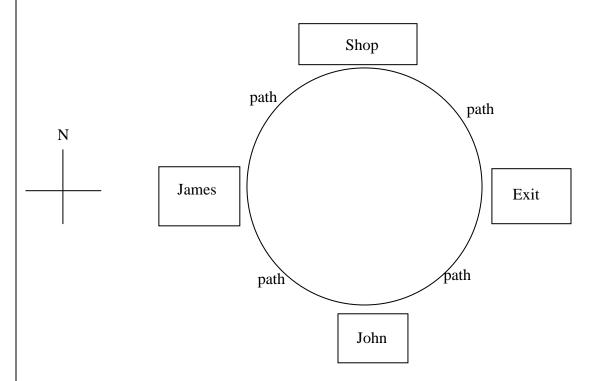
This is the menu in the canteen. Examine it and then answer questions 30 - 32.

<u>Starter</u>	Price (£)
soup	1.50
spring rolls	1.20
<u>Main</u>	
curry	5.50
fish and chips	5.00
pizza	4.50

<u>Dessert</u>	Price (£)
ice-cream	2.00
cake	1.50
<u>Drinks</u>	
tea / coffee	1.50
coke / sprite	1.00
<u>Meal deal</u>	
starter + main + dessert + drink	8.00

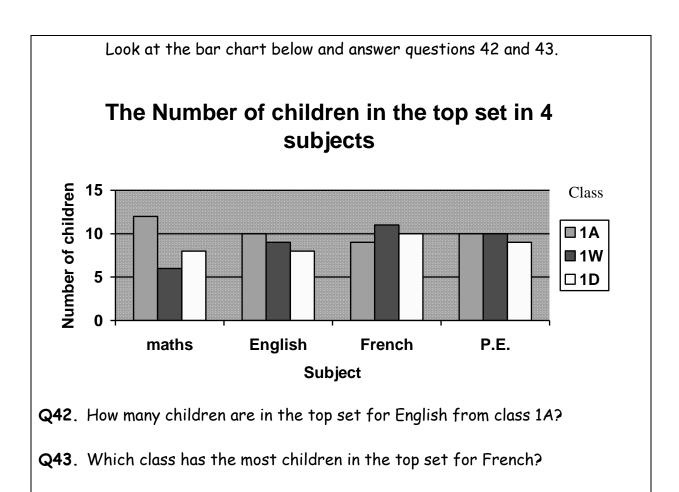
- Q30. What is the least amount you can pay if you just want one item to eat and one drink?
- Q31. What maximum saving can you make by purchasing four items in a "Meal deal", rather than buying them individually?
- Q32. How many different combinations are there for less than £8 if you just order a main, dessert and drink?
- Q33. For which of the following events can you work out the exact probability (chance) of it happening.
 - A You will see three dogs tomorrow.
 - B The probability of getting a head if you toss a coin.
 - C It will snow at Christmas.
 - D The lights will come on if you flick the switch.
 - E None of the above
- Q34. Sanjay goes shopping with £10. How much change does he get after buying 3 packs of pencils each costing £1.20, plus a £1.50 pencil sharpener and a £2.50 pencil case?
- Q35. Sruti breaks the winder on her clock by turning it through a total of 1170°. How many rotations is this?

Q36. John, James, a shop and the exit gate are positioned at the south west, north and east positions respectively around a circular path as shown in the diagram below.

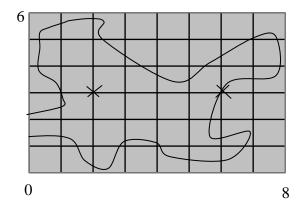


John and James walk at the same speed and meet at the exit at 9.40 a.m. James walks via the shop whilst John does not. John started walking at 9.20 a.m. What time did James start if he spent 10 minutes in the shop?

- Q37. How many £4.75 cinema tickets can Trisha buy with £20?
- Q38. Rebecca is 36 seconds faster than Sophie at running 800m. How long does Rebecca take if Sophie takes 5 minutes and 22 seconds?
- Q39. Kavitha and Ashley have each started a part-time job. Between them they earn £30 on Saturdays. How much does Ashley earn if Kavitha earns three times as much as Ashley?
- Q40. The TV shows 'X-Factor', 'Strictly Come Dancing' and 'Big Brother' had an average of 8.2 million viewers on their last shows. What was the number of viewers in 'I'm a Celebrity' if the average number of viewers for the four shows was 8 million?
- Q41. What is the highest common factor of 24 and 84?



Q44. The outline of a village is drawn as a map with a scale of 1:25,000 on a piece of paper which is 8 cm by 6 cm. The school and the pond are marked on the map with crosses. How far are they away from each other in the village in real life?



Q45. Priti and Benjamin share out 60 marbles in the ratio 3:2. How many marbles does Benjamin receive?