



Product title: Mathematics MCQ for Eleven Plus - Sample Sheet - 4.pdf

Contents:

Answer Sheet

Mathematics Sample Test

1 page

Thank you for your patronage.
Visit us at www.examgenome.com

We regularly update our site with new products and helpful tips and advice.

The test should be completed in 45 minutes once you turn over the page.

Questions

1. Solve for x: $x * 44 = 1672$

- A: 40
- B: 34
- C: 38
- D: 41
- E: 37

2. N is a two-digit odd number that is divisible by 5. N is less than 46. If the digits in N are reversed, the new number is prime. What number is N?

- A: 17
- B: 53
- C: 33
- D: 35
- E: 59

3. What is 49186 to two decimal places?

- A: 49185.009
- B: 49186.001
- C: 491860.02
- D: 49186.00
- E: 4918.60233

4. What is 974.639 to two decimal places?

- A: 974.639
- B: 97.46393
- C: 974
- D: 974.64
- E: 9746.4

5. Solve for x : $x - 679 = 38$

- A: 717
- B: 713
- C: 722
- D: 715
- E: 721

6. N is a two-digit odd number that is divisible by 5. N is less than 55. If the digits in N are reversed, the new number is prime. What number is N ?

- A: 35
- B: 47
- C: 69
- D: 31
- E: 45

7. What is 3904.84978 to two decimal places?

- A: 3904.00
- B: 3904.85
- C: 39048.56
- D: 390.485
- E: 3904.90

8. Which multiple of 7 and 9 is found between 469 and 524?

- A: 504
- B: 509
- C: 477
- D: 514
- E: 500

9. If Olivia counts down from 154 in 10's (i.e. 154, 144, 134, ... etc.), to which negative number will Olivia first come?

- A: -8
- B: -6
- C: -4
- D: -11
- E: -7

10. What is six thousand, nine hundred eighty-seven in figures?

- A: 6998
- B: 6987
- C: 7027
- D: 7012
- E: 6993

11. Which multiple of 7 and 9 is found between 431 and 473?

- A: 466
- B: 445
- C: 468
- D: 441
- E: 443

12. What is four hundred eighty-eight thousand, three hundred seven in figures?

- A: 488313
- B: 488307
- C: 488271
- D: 488354
- E: 488308

13. If George counts down from 100 in 6's (i.e. 100, 94, 88, ... etc.), to which negative number will George first come?

- A: -2
- B: -1

C: -7

D: -6

E: -4

14. Calculate $146 \div 0.8$

A: 168

B: 182.5

C: 194

D: 198

E: 174

15. Which multiple of 7 and 9 is found between 705 and 777?

A: 737

B: 727

C: 756

D: 759

E: 757

16. If Freya counts down from 105 in 10's (i.e. 105, 95, 85, ... etc.), to which negative number will Freya first come?

A: -2

B: -5

C: -10

D: -7

E: -8

17. What is twenty-one thousand, two hundred seventy-four in figures?

A: 21265

B: 21274

C: 21321

D: 21248

E: 21284

18. A train leaves Langmere at 5:36 PM and arrives at Draycott at 8:45 PM. How long does the journey take?

A: 2 hr. and 59 mins.

B: 3 hr. and 9 mins.

C: 3 hr. and 4 mins.

D: 3 hr. and 19 mins.

E: 3 hr. and 24 mins.

19. A train leaves Thornley at 10:18 AM and arrives at Welford at 12:39 PM. How long does the journey take?

A: 2 hr. and 21 mins.

B: 2 hr. and 6 mins.

C: 2 hr. and 31 mins.

D: 2 hr. and 11 mins.

E: 2 hr. and 36 mins.

20. A train leaves Draycott at 9:45 AM and arrives at Langmere at 11:14 AM. How long does the journey take?

A: 1 hr. and 39 mins.

B: 1 hr. and 29 mins.

C: 1 hr. and 34 mins.

D: 1 hr. and 14 mins.

E: 1 hr. and 24 mins.

21. $\frac{5}{12}$ of a number, N, is 294. What is the value of $N + 4$?

A: 691.39

B: 565.22

C: 813.39

D: 523.82

E: 709.60

22. A rectangle (R1) has sides of length L and $4L$. If both sides are multiplied by 3 to make a larger rectangle (R2), what is the ratio of the area of R1 to the area of R2?

- A: 1 : 10
- B: 1 : 4
- C: 1 : 5
- D: 1 : 9
- E: 1 : 11

23. $33^2 + 56^2 = N^2$. What is the value of N?

- A: 67
- B: 65
- C: 69
- D: 70
- E: 63

24. X, Y and Z all work at the same company and get their first drink from the refreshment centre when arriving at work at 08:00. Thereafter, X goes to get a drink every 30 minutes, Y goes every 10 minutes and Z every 17 minutes. What is the next time that X, Y and Z meet at the refreshment centre?

- A: 09:30 AM
- B: 10:30 PM
- C: 10:00 AM
- D: 11:00 AM
- E: 04:30 PM

25. Let $r_{14.256}$ mean 'the remainder when 14 is divided into 256'. So, $r_{14.256} = 4$. What is the value of $r_{10.84} \times r_{14.256}$?

- A: 14
- B: 16
- C: 21
- D: 19
- E: 13

26. What is 'a quarter of 85' divided by 'a third of 52'?

- A: 3.1
- B: 1.0
- C: 1.2
- D: 3.7
- E: 2.4

27. A film lasts for 2 hours and 3 minutes. It is 75% of the way through at 2:22. At what time did the film start?

- A: 12:59
- B: 1:09
- C: 12:49
- D: 12:40
- E: 12:51

28. $11/14$ of 2856 = ?(Round to nearest Integer)

- A: 2852
- B: 3333
- C: 3012
- D: 2244
- E: 2763

29. The price of a book is reduced in a sale by 40%. If the sale price is £10.81, what was the original price of the book before the reduction?

- A: £17.30
- B: £18.02
- C: £20.00
- D: £19.60
- E: £18.72

30. Mr Oliver works in a car showroom. The pay, P, in pounds (£) is worked out as follows: $P = 25T + 120C$, where T is the number of hours that he works, and C is the number of cars that he

sells. Last week Mr Oliver worked from 7:00 to 13:00 on all 7 days, and he sold 1 car every day, except on one day when he sold 1 cars. How much money did Mr Oliver earn last week?

- A: £2002
- B: £1906
- C: £1890
- D: £2048
- E: £2008

31. Harry rounds a whole number to the nearest 1000. A different whole number, rounded to its nearest 10, produces the same result of 2000. What is the maximum difference between the two numbers?

- A: 1033
- B: 504
- C: 999
- D: 987
- E: 975

32. How many 150 ml servings can be poured from a 4 litre jug of water?

- A: 28
- B: 31
- C: 32
- D: 26
- E: 16

33. Isla was t years old 3 years ago. How old was Isla 10 years ago?

- A: $t - 8$
- B: $t + 11$
- C: $t - 7$
- D: $t + 4$
- E: $t - 4$

34. George rings every multiple of 12 less than 330. He then crosses every multiple of 11 less than 330. How many numbers get ringed and crossed?

- A: 2
- B: 1
- C: 3
- D: 4

35. The length of a rectangle is $9x + 5$. The width of the rectangle is half the length. What is the perimeter of the rectangle?

- A: $27x + 8$
- B: $19x + 17$
- C: $27x + 15$
- D: $30x + 14$
- E: $27x + 7$

36. A snake can travel 29 times the length of its body in one minute. If the snake is 16 m long, approximately how far can it travel in 1 hour?

- A: 27.8 km
- B: 32.4 km
- C: 30.4 km
- D: 29.5 km
- E: 29.7 km

37. [-19, 99, -3, 5, -39, 85, 71, -12, -59, 71, -35, 83, -80, 19, -45]

(a): What is the range?

- A: 71
- B: 4
- C: 179
- D: 93
- E: -74

(b): What is the median?

- A: -16
- B: -3

C: 27

D: -1

E: 67

(c): What is the mode?

A: -71

B: 71

C: -80

D: 99

E:-19

(d): What is the mean (rounded to 2 decimal places)?

A: 9.07

B: 25.86

C: -9.82

D: 9.40

E: -12.9

38. Small cubes each have lengths of 3 cm. A number of these cubes are used to make a larger, solid cube of length 6 cm. How many such small cubes are required?

A: 10

B: 7

C: 11

D: 8

E: 4

39. What is the 59th term of the sequence? 101, 114, 127, 140, 153, 166, ...

A: 797

B: 829

C: 884

D: 751

E: 855

40. $1 \text{ ml} = 1 \text{ cm}^3$. An empty tank measures $79 \text{ cm} \times 197 \text{ cm} \times 135 \text{ cm}$. How many litres of water can the tank hold?(Round to the nearest Integer)

- A: 2786 litres
- B: 1590 litres
- C: 2101 litres
- D: 1730 litres
- E: 1741 litres

41. Small cubes each have lengths of 5 cm. A number of these cubes are used to make a larger, solid cube of length 10 cm. How many such small cubes are required?

- A: 8
- B: 6
- C: 10
- D: 4
- E: 13

42. Emily thinks of a number. First, she squares her number and then she adds 31 to the result. Finally, she divides that result by 11. Emily gets an answer of 79. What was Emily's original number?

- A: 27
- B: 31
- C: 26
- D: 23
- E: 29

43. Grace works in a supermarket and is asked to stack boxes of crackers. The boxes are cubes that measure $21 \text{ cm} \times 21 \text{ cm} \times 21$. The floor space in which to stack the boxes is limited to $1.5 \text{ m} \times 1.5$, and Grace can go up to a maximum height of 3 m. What is the maximum number of boxes that Grace can put in the stack?

- A: 626
- B: 837
- C: 677
- D: 686
- E: 531

44. Grace thinks of a number. First, she squares her number and then she adds 55 to the result. Finally, she divides that result by 11. Grace gets an answer of 8. What was Grace's original number?

- A: 6
- B: 4
- C: 9
- D: 5
- E: 8

45. Amelia works in a supermarket and is asked to stack boxes of crackers. The boxes are cubes that measure $45\text{ cm} \times 45\text{ cm} \times 45$. The floor space in which to stack the boxes is limited to $2\text{ m} \times 2$, and Amelia can go up to a maximum height of 6 m. What is the maximum number of boxes that Amelia can put in the stack?

- A: 238
- B: 252
- C: 165
- D: 208
- E: 161

46. A snake can travel 23 times the length of its body in one minute. If the snake is 19 m long, approximately how far can it travel in 1 hour?

- A: 29.0 km
- B: 29.9 km
- C: 26.2 km
- D: 27.2 km
- E: 30.1 km

47. [-24, 49, 24, 26, -16, -14, -38, -7, -22, -9, -6, 4, -8, 24]

(a): What is the range?

- A: -26
- B: -32
- C: 87
- D: -43

E: -8

(b): What is the median?

A: 37

B: -7.5

C: 24

D: -5

E: 2

(c): What is the mode?

A: -25

B: -26

C: -29

D: 24

E: -35

(d): What is the mean (rounded to 2 decimal places)?

A: 6.5600000000000005

B: -7.73

C: 3.62

D: -1.21

E: 12.75

48. Which square number lies between 10357 and 12720?

A: 11563

B: 11282

C: 11362

D: 11169

E: 12321

49. $1 \text{ ml} = 1 \text{ cm}^3$. An empty tank measures $93 \text{ cm} \times 73 \text{ cm} \times 71 \text{ cm}$. How many litres of water can the tank hold?(Round to the nearest Integer)

A: 482 litres

B: 444 litres

C: 282 litres

D: 649 litres

E: 497 litres

50. What is the 10th term of the sequence? 30, 32, 34, 36, 38, 40, ...

A: 43

B: 62

C: 42

D: 48

E: 54

examGenome



Answer Sheet

1. C	2. D	3. D	4. D	5. A
6. A	7. B	8. A	9. B	10. B
11. D	12. B	13. A	14. B	15. C
16. B	17. B	18. B	19. A	20. B
21. E	22. D	23. B	24. E	25. B
26. C	27. C	28. D	29. B	30. C
31. C	32. D	33. C	34. A	35. C
36. A	37(a): C	37(b): B	37(c): D	37(d): D
38. D	39. E	40. C	41. A	42. E
43. D	44. A	45. D	46. C	47(a): C
47(b): B	47(c): D	47(d): D	48. E	49. A
50. D				

examGenome