

Maths Mock Test Paper 5 Answers

Q#	Answer	Explanation
1	D	The first 8 is in the ten-thousands column (80,000) and the second 8 is in the tens column (80). The difference is $80,000 - 80 = 79,920$.
2	D	For times after 12:00, take away 12 hours and add pm: $14 - 12 = 2$, so the time is 2:30 pm.
3	C	Divide the distance by the time: $100 \div 20 = 5$ metres per second.
4	C	$12 \times 4 = 48$. You can double twice: 12 doubled is 24, and 24 doubled is 48.
5	E	With negative numbers, the one nearest to zero is the largest. -1 is closest to zero, so it is the largest.
6	A	All three angles sit on a straight line, so they add up to 180° . Since $60^\circ + 70^\circ = 130^\circ$, $x = 180^\circ - 130^\circ = 50^\circ$.
7	B	10 cats is 2 lots of 5, so multiply the dog part by 2 as well: $2 \times 2 = 4$ dogs.
8	B	Replace x with 10, which gives $10 - 6 = 4$.
9	E	For times in the evening add 12 to the hour: $11 + 12 = 23$. So 11:20 pm is 23:20.
10	D	Multiply the number of boxes by the eggs in each box: $7 \times 12 = 84$ eggs.
11	C	Divide the distance by the time: $100 \div 12.5 = 8$ metres per second.
12	C	One kilogram costs $\pounds 48 \div 6 = \pounds 8$, so 2.5 kg costs $2.5 \times \pounds 8 = \pounds 20$.
13	B	Each small square up the kilometre axis is worth 4 km, so 32 km is two squares below the 40 line. Going across to the line and down reaches 20 on the miles axis.
14	A	0.92 is largest because it has 9 tenths. Between the others, 0.29 is greater than 0.209.

15	C	From the 5th to the 26th is 21 days, and $21 \div 7 = 3$ exactly. Three whole weeks later is the same day, so 26 May is also a Sunday.
16	B	One sweet is $250 \div 20 = 12.5$ g, so 8 sweets weigh $8 \times 12.5 = 100$ g.
17	C	The trays hold $7 \times 18 = 126$ eggs, and after 4 are broken there are $126 - 4 = 122$ left.
18	D	To round to 2 decimal places, look at the 3rd decimal digit (7). Since $7 \geq 5$, we round up. $12.347 \rightarrow 12.35$ seconds.
19	C	The terms are 100, 88, 76, 64, 52, 40, 28. The 6th term is exactly 40, so the 7th term, 28, is the first one below 40.
20	C	The factors of 100 are 1, 2, 4, 5, 10, 20, 25, 50 and 100. That is 9 factors, an odd number because 100 is a square number.
21	E	Use $(n - 2) \times 180^\circ$ with $n = 10$: $(10 - 2) \times 180^\circ = 8 \times 180^\circ = 1440^\circ$.
22	D	Division comes first: $100 \div 5 = 20$, and then $20 + 5 = 25$.
23	D	Each machine makes $180 \div 3 = 60$ items an hour, so 5 machines in 2 hours make $5 \times 2 \times 60 = 600$ items.
24	D	Each piece uses $150 \div 12 = 12.5$ g of butter, so 30 pieces use $30 \times 12.5 = 375$ g.
25	B	In 4 hours the fall is $4 \times 6 = 24$ degrees, and $3 - 24 = -21$, so the temperature is -21°C .
26	D	Both points are 2 squares up, so the line joining them is horizontal. Count from -3 to 0, which is 3 squares, then 0 to 5, which is 5 more: $3 + 5 = 8$ squares.
27	B	0.06 means 6 hundredths, which is $6/100$. Dividing top and bottom by 2 gives $3/50$.
28	C	Each side is $32 \div 4 = 8$ cm, so the area is $8 \times 8 = 64$ cm ² .
29	B	Look at the second decimal place (7). Since it is 5 or more, round up the first decimal place (6) to 7, making it 45.7.

30	B	The hour hand is just past the 10. The minute hand points at the 1, and $1 \times 5 = 5$ minutes. The time is 10:05.
31	C	Ben's route is $15 \times 20 \div 60 = 5$ km. Walking 5 km at 5 km/h takes $5 \div 5 = 1$ hour.
32	B	1,750 g is 1.75 kg, and $5 - 1.75 = 3.25$ kg.
33	A	The coffee bar reaches 70 and the tea bar reaches 45, so the difference is $70 - 45 = 25$ drinks.
34	B	The first two significant figures are 5 and 6. The next digit is 1, which is less than 5, so we round down. $0.00561 \rightarrow 0.0056$.
35	C	Dividing by 100 moves every digit two places to the right, so 3,600 becomes 36.
36	A	Multiplying by 1,000 moves the decimal three places to the right: 0.048 becomes 48.
37	C	Four consecutive numbers average $90 \div 4 = 22.5$, so they are 21, 22, 23 and 24, and the smallest is 21.
38	B	Make B the same in both ratios. Multiplying $A : B = 5 : 2$ by 3 gives $15 : 6$, which matches the 6 in $B : C = 6 : 5$, so $A : B : C = 15 : 6 : 5$.
39	B	Add $3x$ to both sides: $40 = 7x + 5$. Take 5 away: $35 = 7x$, so $x = 5$.
40	C	Ben starts at 1 hour and reaches 60 km at 4 hours, so he travels 60 km in 3 hours. His speed is $60 \div 3 = 20$ km/h.
41	C	HCF $\times$ LCM gives the product of the two numbers: $8 \times 48 = 384$. So the other number is $384 \div 16 = 24$. Check: the HCF of 16 and 24 is 8 and the LCM is 48.
42	D	The three different faces are $7 \times 6 = 42$, $7 \times 2 = 14$ and $6 \times 2 = 12$ cm ² . There are two of each, so the surface area is $2 \times (42 + 14 + 12) = 136$ cm ² .
43	A	Sydney is ahead, so add 9 hours to 08:30. That gives $08:30 + 9$ hours = 17:30 in Sydney.
44	C	3,847 rounds to 4,000 (1 s.f.) and 19 rounds to 20 (1 s.f.). $4,000 \div 20 = 200$. (The exact answer is approximately 202.5.)

45	D	The exterior angles always add up to 360° . With 20 equal ones, each is $360^\circ \div 20 = 18^\circ$.
46	C	1.5 litres is 1,500 ml, and $1,500 \div 250 = 6$ glasses.
47	B	Divide distance by time: $1,200 \div 30 = 40$ metres every minute.
48	A	First $-4 \times (-3) = 12$, since two negatives give a positive. Then $12 \times (-2) = -24$.
49	D	12 minutes is 0.2 of an hour, so the time is 5.2 hours and the speed is $468 \div 5.2 = 90$ km/h.
50	A	The goals scored come to 8 from the one-goal matches, 8 from the two-goal matches and 6 from the three-goal matches, giving $8 + 8 + 6 = 22$ goals. Over 20 matches the mean is $22 \div 20 = 1.1$.