Top Skills

OC Maths Tests

For Opportunity Class Entry Tests
& Scholarship Tests Preparation

SAMPLE

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SAMPLE

OC MATHS TEST 1

1. Jean baked 12 cupcakes. His family ate 8 and Jean ate the remainder. Which calculation shows how many cupcakes Jean ate?

a) 12 ÷ 8 = 1 ½

b) 8 – 12 = - 4

c) 12 + 8 = 20

d) 12 – 8 = 4

2. Pablo's friends ordered two coffees, a smoothie and a muffin. How much did their order cost altogether?

a) $11.50

b) $13.00

c) $13.50

d) $14.50



3. What is 50% of $48?

a) $24

b) $12

c) $4.80

d) $20

4. Seong paints four rectangular walls. Each wall is 6 metres wide and 4 metres high. If 1 litre of paint is needed for every square metre, how many litres of paint does Seong need to paint the four walls?

a) 24 litres

b) 96 litres

c) 94 litres

d) 86 litres

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OC MATHS TEST 1

5. Gemma cut a cake in half. She then cut one piece in half again. She then cut one of these pieces in half again, and ate one of these smaller pieces. What fraction represents the amount of cake that Gemma ate?

a) $^1/_8$

b) $^1/_2$

c) $^1/_6$

d) $^1/_4$

6. Which of the following images does NOT have an axis of symmetry?

a)



b)



c)



d)



7. Which of the following maths equations is incorrect?

a) 5 ÷ 5 + 20 = 21

b) 5 – 5 × 20 = 0

c) 5 + 5 × 20 = 105

d) 20 ÷ (5 – 1) = 5

8. Which of the following sets of metric measurements is ordered from smallest to largest?

a) 6 g, 25 kg, ½ kg, 400 g

b) 50 cm, 550 mm, 56 cm, 5 m

c) 880 g, 8 kg, 9 ½ kg, 900 g

d) 60 mL, 700 mL, ½ L, 770 mL

SAMPLE

OC MATHS TEST 1

9. What is the place value of the underlined digit?

56 7<u>8</u>9 100

a) hundreds

b) thousands

c) ten thousands

d) hundred thousands

10. What number should replace the question mark?

90 000 + 100 + 1 + 500 000 + 10 + ? = 596 111

a) 600

b) 6 000

c) 6 100

d) 60 000

11. Aldo owns 2 fully-grown German Shepherds. The total weight of both dogs should be approximately:

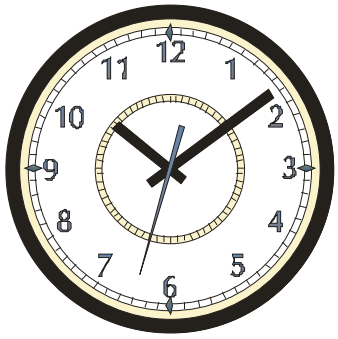
a) 5 kg

b) 20 kg

c) 75 kg

d) 200 kg

12. What time is showing on the clock?



a) Eight to two

b) Eight past ten

c) Ten to two

d) Half past ten

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OC MATHS TEST 2

1. Ari must tile a bathroom floor which is 40 m² in area. He has finished tiling 25% of the floor. What area of the bathroom floor remains to be tiled?

a) 30 m²

b) 25 m²

c) 35 m²

d) 10 m²

2. Finola's plane left Sydney at 6 am Monday, and landed in Budapest at 9.30 am Tuesday. How long did the flight take?



a) 15 hours 30 minutes

b) 27 hours 30 minutes

c) 29 hours

d) 29 hours 30 minutes

3. Which equation is NOT correct?

a) 8 × 8 – 50 = 14

b) 30 – 9 × 3 = 3

c) 50 + 12 ÷ 3 = 54

d) 70 ÷ 7 + 3 = 10

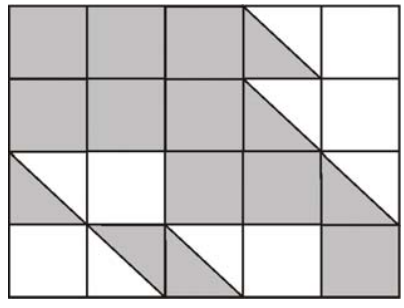
4. If each small square is equal to 10 m² in area, what is the size of the entire shaded area?

a) 120 m²

b) 30 m²

c) 130 m²

d) 135 m²



SAMPLE

OC MATHS TEST 2

5. Anu has 4 people in her group of friends, including herself. If every person in the group writes a letter to each other person, how many letters are written in total?

a) 4

b) 8

c) 9

d) 12

6. Louie, Chetan and Daniel are playing a game of cards. Daniel has half as many cards as Chetan. Louie has 4 less cards than Daniel. If Louie has 10 cards, how many cards does Chetan have?

a) 14

b) 20

c) 24

d) 28

7. Wanda is saving up to buy an mp3 player which costs $299. If she ears $90 by washing cars, $50 from babysitting, $100 from cleaning the house and $40 from ironing, how much more money does she need?

a) $19

b) $29

c) $39

d) $49

8. How many people did NOT choose Italian as their favourite type of cuisine?

Favourite Cuisine	Number of People
Thai	7
Italian	9
Chinese	10
Indian	8

a) 17

b) 9

c) 25

d) 24

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ANSWERS AND EXPLANATIONS

OC MATHS TEST 1

1. d.
2. d. (2 × $3.00) + (1 × $4.75) + $3.75 = $14.50.
3. d. 50% of $48 is the same as ½ of $48 or $48 ÷ 2 = $24.
4. b. The area of 1 rectangular wall is 4 × 6 = 24 metres squared. As there are 4 walls, 4 × 24 = 96 metres squared. Hence Seong needs 96 litres of paint.
5. a. 1 × ½ × ½ × ½ = $^1/_8$.
6. d.
7. b. 5 – 5 × 20 = – 95 (Remember your order of operations: divide or multiply before you add or subtract).
8. b. If they are all converted to centimetres, then 50 cm, 550 mm, 56 cm, 5 m = 50 cm, 55 cm, 56 cm and 500 cm.
9. c.
10. b. 500 000 + 90 000 + 6 000 + 100 + 10 + 1 = 596 111.
11. c.
12. b.

OC MATHS TEST 2

1. a. 25% is the same as ¼. As ¼ of 40 m² = 10 m², this means that 30 m² of tiling remains to be completed.
2. b. 6 am Monday + 24 hours (1 day) = 6 am Tuesday. Add another 3 hours and 30 minutes to reach 9.30 am. 24 hours + 3 hours and 30 minutes = 27 hours and 30 minutes.
3. d. 70 ÷ 7 + 3 = 13.
4. a. There are 9 full squares shaded in and 6 half squares shaded in, which all together makes 12 full squares. 12 × 10m² = 120 m².
5. d. Each person must write a letter to the 3 other members of the group. As there are 4 members in the group, 3 + 3 + 3 + 3 = 12.
6. d. If Louie has 10 cards, then Daniel has 14 cards (4 more than Louie) and Chetan has 28 Cards (twice as many as Daniel).
7. a. $90 + $50 + $100 + $40 = $280. $299 – $280 = $19.
8. c. 7 + 10 + 8 = 25.
9. c.
10. b. $4\overline{)424}$ **106.**
11. d.
12. a. ½ × 32 = 16. ¼ × 16 = 4.

OC MATHS TEST 3

1. a. If Bethan turned 14 in 2004, then Bethan was born in 1990. As Celia is 3 years older than Bethan, Celia must be born in 1987.
2. d. 54 is not a multiple of 4.
3. d. Each number is the sum of the two numbers that come before it i.e. 1 + 2 = 3, 2 + 3 = 5, 3 + 5 = 8, 8 + 5 = 13.
4. a.
5. b. Working backwards, 29 – 5 = 24 and 24 ÷ 8 = 3.
6. b. 17 ÷ 5 = 3 remainder 2.
7. d.
8. a. 33 + 28 + 29 = 90. ½ × 90 = 45.
9. c. 3 × 3 = 9.
10. d. It is a pyramid, not a prism.
11. b.
12. a. Roberto must have 4 fifty cent pieces and 5 twenty cent pieces as 4 × 50 + 5 × 20 = 300.

SAMPLE