

Maths Common Entrance Exam Test

Mathematics

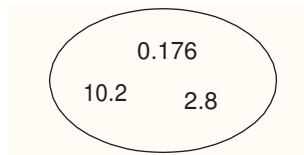
Sample 1



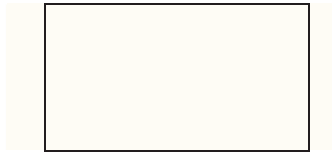
Anthony Colins Institute
Educational Development



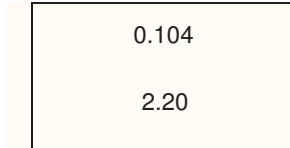
1-3 Multiply each number in the oval by 100 and write the answer in the square.



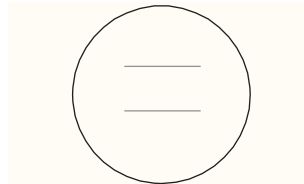
0.176
10.2 2.8



4-5 Divide each number in the rectangle by 10 and write the answer in the circle.



0.104
2.20



Write the exact answer to each calculation.

6 82×5

7 $273 \div 7$

8 49×8

9 $127 \div 5$

10 4270×8



Work out the following, using the order of operations. Remember to do any calculations in brackets first each time.

11 $4 \times 6 + 24$

12 $13 \times (7 + 11)$

13 $6 + 43 - 16 \div 4$

14 $4 \div (25 - 9)$

15 $21 - 3 \times 7$



3

2

5

5

Fill in the missing numbers to make the calculations correct.

- 16 $10.07 + \underline{\hspace{2cm}} = 101$
 17 $0.279 \div 9 = \underline{\hspace{2cm}}$
 18 $0.32 \times \underline{\hspace{2cm}} = 6.4$
 19 $102.49 - 75.62 = \underline{\hspace{2cm}}$
 20 $8.8 \div \underline{\hspace{2cm}} = 2.2$

5

Match the equivalent fractions, decimals and percentages. Write the correct number in the space.

- | | |
|-------------------------|--------------------|
| 21 15% _____ | (1) $\frac{3}{4}$ |
| 22 $\frac{2}{6}$ _____ | (2) $\frac{3}{10}$ |
| 23 0.75 _____ | (3) 0.15 |
| 24 30% _____ | (4) 2% |
| 25 $\frac{1}{50}$ _____ | (5) 33% |

5

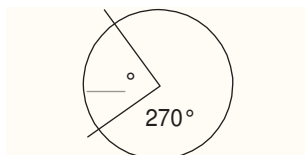
Read the questions carefully each time.

- 26 There were 325 pies at the banquet. If one dish holds 30 pies, how many dishes do you need to hold all the pies? _____
- 27 A bag holds 47 sweets. How many children can have 4 sweets each? _____
- 28 A bottle of olive oil holds 250 ml. A larger bottle holds two-and-a-half times as much. What is its capacity? _____
- 29 Which has the greater mass, 3 kg of onions or 7 lb of feathers? _____
- 30 Bridgetown, Barbados is 4 hours behind GMT. If a plane leaves London at 06:00 GMT, write the local time it lands in Bridgetown if the flight takes 6 hours. _____

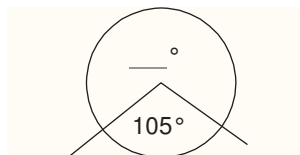
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Write the missing angles.

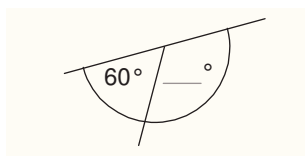
31



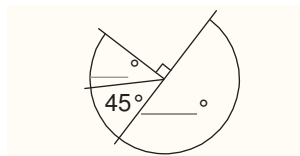
32



33



34-35



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- 36 Write 238 grams in kilograms.
- 37 Write 27 millilitres in litres.
- 38 Write 4.289 kilometres in metres.
- 39 Write 327 centimetres in kilometres.
- 40 Write 0.04 litres in centilitres.

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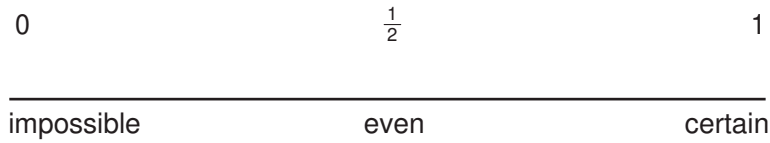
Write the new co-ordinates if each of these points is reflected in the y axis.

- 41 (1,1)
- 42 (2,1)
- 43 (0,3)
- 44 (3,2)
- 45 (1,0)

5

46–50 You flip a fair coin 6 times. Write the letter for each probability in the appropriate place in the scale.

- a) You get 6 heads.
- b) You get at least 1 tail.
- c) You get 3 tails and 4 heads.
- d) Assuming you have already flipped the coin 5 times and got 5 heads, you flip again and get another head.
- e) You get at least 2 heads.



5

Answers

- 1–3 17.6, 280, 1020
4–5 0.0104, 0.22
6 410
7 39
8 392
9 25.4
10 34160
11 48
12 234
13 45
14 $\frac{1}{4}$ or 0.25
15 0
16 90.93
17 0.031
18 20
19 26.87
20 4
21 3
22 5
23 1
24 2
25 4
26 11
27 11
28 625 ml
29 7 lb of feathers
30 08:00
31 90
32 255
33 120
34–35 45, 180
36 0.238 kg
37 0.027 l
38 4289 m
39 0.00327 km
40 4 centilitres
41 $(-1, 1)$
42 $(-2, 1)$
43 $(0, 3)$
44 $(-3, 2)$
45 $(-1, 0)$
46–50 a) answer is close to impossible
b) answer is close to 1
c) answer is impossible
d) answer is evens
e) answer is between evens and 1