## Maths Example Paper <br> Year 7 entry - 45 minutes

Please use spare paper to do your working out.

1. Write these decimal numbers in order, largest first
2.01
$2.1 \quad 2.001$
2.11
2.102
2. Write these decimals as fractions

$$
0.615 \quad 0.035
$$

3. Total 46563, 9785 and 859
4. $2 \times h=25+h$

What is $h$ ?
5. In a circle three angels are known: 100, 100 and 80 degrees. What is the value of the missing angle?
6. Jack has 42 Pokemon cards and Tom has 38. Their friend, James has three times as many cards as Jack and Tom have altogether. How many cards does James have?
7. Mark weighed 7 kg when he was born. He gained 125 g each week. How heavy was he in kilograms after 4 weeks? 8 weeks?
8. Max counted the money in his piggy bank. He had $£ 28.74$. He repaid his mum $£ 10.50$ that he owed her and spent half the rest on magazines. How much did he have left after that?
9. Mr Spendstoomuch has (minus) $£ \ddagger 76.20$ in his account. He gets paid £120.75. How much does he have in his account now?
10. Calculate the area of a triangle with a base width of 12 cm and a height of 7 cm .
11. A cuboid has the dimensions: height 9 cm , width 8 cm and length 10 cm . What is its volume?
12. 2764 divided by 9
13. What is $15 \%$ of $£ 29$ ?
14. Joshua has $1 / 3$ of a pizza. He shares it equally with Zac. How much pizza do they have?
15. $2816 \times 17=$

## Five challenge questions

16. What is twelve thousand plus twelve hundred plus twelve?
A. 12,121
B. 13,212
C. 121,212
D. 132,012
E. 1,212,012
17. Which of these equals 1 ?
A. $1^{2}+1^{2}$
B. $1^{2}-1^{2}$
C. $2^{2}-1^{2}$
D. $3^{2}-2^{2}$
E. $2^{2} \div 2^{2}$
18. I fold a rectangle along its diagonal. What outline shape do I get?
A. Triangle
B. Kite
C. Square
D. Pentagon
E. Hexagon

19. Willy Wontey can't decide which offer to take when buying doughnuts. They are all priced at 50p each but shops offer different bargains. Which shop gives the best value?
A. 3 for the price of 2
B. 5 for the price of 4
C. 2 for the price of 3
D. 5 for the price of 3
E. 1 for the price of 6
20. Sian thinks of a number. She multiplies it by 6 then adds 8 . Finally, she halves it and gets the answer 7. What number did she start with?
A. 1
B. $2^{1 / 2}$
C. 25
D. 56
E. 160

## Answers

$\begin{array}{llllll}1 . & 2.11 & 2.102 & 2.1 & 2.01 & 2.001\end{array}$
2. $\frac{615}{1000} \quad \frac{35}{1000}$ (or equivalent)
3. 57,207
4. $\mathrm{h}=25$
5. Missing angle $=80$ degrees
6. James has 240 cards
7. After 4 weeks -7.5 kg . After 8 weeks -8 kg
8. $£ 9.12$
9. $£ 44.55$
10. $42 \mathrm{~cm}^{2}$
11. $720 \mathrm{~cm}^{3}$
12. 307 and $1 / 9$ th, or 307 remainder 1 , or 307.1 recurring
13. $£ 4.35$
14. $1 / 6$ th
15. 47,872
16. B. 13,212
17.
E. $2^{2} \div 2^{2}$
18.
D. Pentagon
19.
D. 5 for $£ 1.50=30$ p each
20. A. 1

