

- 1)  $20 + j = 20$   
 $20j = p$   
What is the value of  $p$ ?

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- 2) Tim has a piece of string that is 1.74 m long.  
He cuts it into pieces, each measuring 3 cm.  
How many pieces does Tim have?

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- 3) The cost of a phone call is £2.20 for the first minute and then 16 pence for every additional 10 seconds.  
If the cost of a call is £3.96, what is the duration of the call?  
*Write your answer in seconds.*

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- 4) 36 is 40% of...

A	13
B	90
C	24
D	99

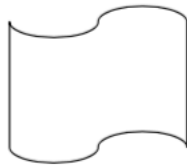
- 5) For any numbers  $x$  and  $y$ ,  $x \star y = x(y + 7)$   
What is the value of  $8 \star 7$ ?

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- 6)  $\frac{1}{5}$  of the price of a table is £95.  
What number must I multiply £95 by to find the price of 7 tables?

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- 7) How many lines of symmetry does this shape have?



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- 8) The average weight of 5 sheep is 123 kg and the average weight of 4 cows is 455 kg.  
What is the average weight of all 9 animals?  
*Write your answer to the nearest kg.*

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- 9) The average of four consecutive odd numbers is 24.  
What is the smallest number?

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- 10) In a car park, the number of cars (4 wheels) equals the number of motorcycles (2 wheels).  
If the total number of car and motorcycle wheels is 162, how many cars are there in the car park?

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- 11) A restaurant conducted a survey about whether people liked pizza, chips or both.  
1,000 people took part in the survey.  
750 liked chips and 522 liked pizza.  
How many people who took the survey liked both chips and pizza?
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- 12) A 10-pence coin weighs 3.5 g and a 20-pence coin weighs 2 g.  
Emma has £2 worth of 10-pence coins and £2 worth of 20-pence coins.  
What is the total weight of Emma's coins?
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- 13) Last year, Tom was  $(x - 7)$  years old.  
Tim is  $(x + 4)$  years old.  
What is the difference in age between Tom and Tim today?

A	8 years
B	9 years
C	10 years
D	11 years

14)  $\frac{5}{8} = f\%$

What is the value of  $f$ ?

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15)  $1^{23} - 7 = b$

What is the value of  $b$ ?

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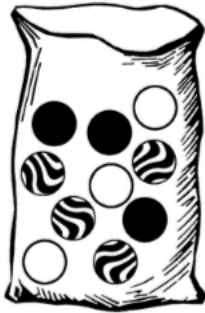
16) The clock below is 73 minutes fast. It shows a time of 10:10 pm.  
What is the correct time?



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17) This bag contains white, black and striped marbles?

If I pick one marble at random, what is the probability that it is not black?



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18) Simon is sailing South-West.

He turns to sail in the opposite direction.

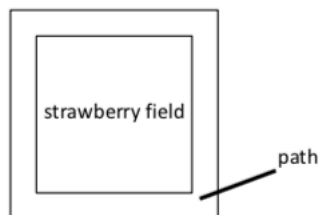
In what direction is Simon now sailing?

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19) A square strawberry field has sides of 10 m.

It is surrounded on all sides by a path that is 1 m wide.

What is the total area of the path?



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- 20) I remove the four Queens, four Aces and four Jacks from a pack of 52 playing cards.  
If I then pick a card from the remaining cards at random, what is the probability that it will be a King?  
*Give your answer as a fraction in its lowest terms.*
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