| Question | Answer |
|:---:|:---:|
| 1 | **B** 11 minutes<br>The bus leaving Wales Farm at 13:10 reaches Willesden at 13:21. This is 11 minutes. |
| 2 | **D** 20%<br>2/10 = 20/100 = 20%. |
| 3 | **D** 45 litres<br>Using the graph, 5 gallons = 22.5 litres. So, 10 gallons = 45 litres. |
| 4 | **B** £36<br>Normal cost = 8 x 5 = £40<br>10% of £40 = £4.<br>40 – 4 = £36 |
| 5 | **D** 135°<br>This is an obtuse angle. 135° is the only obtuse angle in the list. |
| 6 | **E** 15<br>90 ÷ 6 = 15 |
| 7 | **A** 11 mins<br>Calculate the mean.<br>15 + 7 + 12 + 11 + 10 = 55 minutes in total<br>55 ÷ 5 = 11 mins on average. |
| 8 | **C** £3.50<br>250 is 2.5 times greater than 100.<br>2.5 x 1.4 = 3.50. |
| 9 | **C** 0.032<br>Move the decimal 3 places to the left. |
| 10 | **D** 150 years<br>In 1800 the population was 10 million.<br>In 1950 the population was 45 million.<br>1950 – 1800 = 150 years. |
| 11 | **E** 63<br>72 ÷ 8 = 9 marbles are taken out.<br>72 – 9 = 63 marbles left. |
| 12 | **D** 7608 |
| 13 | **D** They are all square numbers |

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| | $4 = 2^2$<br>$81 = 9^2$<br>$144 = 12^2$ |
| 14 | **A** 177 cm<br>153 + 24 = 177 cm |
| 15 | **B** 4.55 litres<br>7 x 650 = 4500 ml<br>4550 ÷ 1000 = 4.55 L |
| 16 | **E** 64 |
| 17 | **A** 21<br>3 parts red apples + 1 part green apples = 4 parts in total.<br>28 ÷ 4 = 7    1 part<br>7 x 3 = 21 red apples. |
| 18 | **C** 175<br>10% = 250 ÷ 10 = 25<br>25 x 7 = 175 |
| 19 | **D** 20<br>The lowest common multiple of 5 and 4 is 20. |
| 20 | **C** 1275 |
| 21 | **D** 8.75<br>Both inputs are 10 times smaller so the output must be 100 times smaller when multiplying. |
| 22 | **B** 35 boxes<br><br>```
          0  3  5
   2  2 | 7  7  0
      -    0
           7  7
        -  6  6
           1  1  0
        -  1  1  0
                 0
``` |
| 23 | **B** 4 hours<br>Rain covers one third of the pie chart.<br>12 ÷ 3 = 4 hours. |

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| 24 | **A** 33<br><br>33 x 100 = 3300.<br>So, 33 x 99 will simply be 33 less than 3300. |
| 25 | **B** 8 children<br><br>20 children took the bus which is 5 blocks.<br>Each block is 20 ÷ 5 = 4 children.<br>The difference between bicycle and car is 2 blocks which is 8 children. |
| 26 | **D** 4.5 kg<br><br>5 x 3.7 = 18.5<br>4 x 3.5 = 14<br>18.5 – 14 = 4.5 kg |
| 27 | **B** 25%<br><br>One quarter of the circle is shaded. This is 25%. |
| 28 | **B** 8071 |
| 29 | **C** 50 ships<br><br>Dock A has 3 x 20 = 60 ships.<br>Dock C has 20 ÷ 2 = 10 ships.<br>60 – 10 = 50 ships. |
| 30 | **A** 3 thousands |
| 31 | **C** (6 , 3) |
| 32 | **D** 96<br>The number doubles every term. 48 x 2 = 96. |
| 33 | **C** 2948<br><br>3048 – 100 = 2948 |
| 34 | **C** 30 sweets<br><br>$1 - \frac{3}{8} = \frac{5}{8}$ sweets left.<br>48 ÷ 8 x 5 = 30 sweets left. |
| 35 | **D** 18 numbers<br>The numbers you can make are:<br>333, 335, 343, 345, 353, 355, 433, 435, 443, 445, 453, 455, 533, 535, 543, 545, 553, 545.<br>18 numbers. |
| 36 | **E** 10 hours<br>Watching TV = 7 hours<br>Reading = 3 hours<br>7 + 3 = 10 hours |

| 37 | **B** 20 weeks |
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| | $35 \div 2 = 17.5$<br>So, $35 \div 20 = 1.75$ |
| 38 | **D** 8 squares |
| | Area of small square = 2 x 2 = 4 cm$^2$<br>Area of large rectangle = 8 x 4 = 32 cm$^2$<br>32 ÷4 = 8 squares will fit. |
| 39 | **B** 20 cm |
| | Centre of the circle to the circumference is the radius. The radius is half of the diameter.<br>Radius = $40 \div 2 = 20$ cm |
| 40 | **B** (2 , -5) |
| | Reflection in the y-axis would move x to (2 , 5)<br>Then, reflection in the x-axis would move x to (2 , -5) |
| *Total* | /40 |