**Pie Charts**

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| **1)** The pie chart shown below shows favourite colours of a group of people.  http://chart.apis.google.com/chart?cht=p&chd=t:4,3,5,7,11&chs=300x200&chl=black%7Cred%7Cblue%7Cgreen%7Cpink        Find the total number of people in the survey, given that 3 people prefer red | [1] |
| **2)** The pie chart shown below shows favourite colours of 30 people.  http://chart.apis.google.com/chart?cht=p&chd=t:4,1,1,7,17&chs=300x200&chl=black%7Cred%7Cblue%7Cgreen%7Cpink        Find the number of people that prefer green | [1] |
| **3)** The pie chart below shows how students travel to school (*angles are given in brackets*).  http://chart.apis.google.com/chart?cht=p&chd=t:3,2,3,7,15&chs=330x200&chl=car%20%2836%29%7Ctaxi%20%2824%29%7Cbicycle%20%2836%29%7Cbus%20%2884%29%7Cwalk%20%28180%29       a) What is the most common method of travel?            b) What fraction of the students travel to school by car?             c) If 3 students travel by car, how many people took part in the survey? | [1] |
| **4)** The pie chart below shows how students travel to school.  http://chart.apis.google.com/chart?cht=p&chd=t:13,6,7,22,42&chs=300x200&chl=walking%7Cbus%7Ctaxi%7Ccar%7Cbicycle       a) What is the most common method of travel?            b) What is the angle for students who travel by car?            c) What fraction of the students travel to school by walking?             d) If 13 students travel by walking, how many people took part in the survey? | [1] |
| **5)** The table below shows the favourite colours of 30 people. Complete the table to show the angles that would need to be calculated to construct a pie chart.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Colour | black | red | blue | green | pink | | Frequency | 3 | 2 | 2 | 8 | 15 | | Angle |  |  |  |  |  | | [1] |
| **6)** The table below shows the favourite colours of 90 people. Calculate the angle for each colour and construct a pie chart.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Colour | green | pink | black | blue | red | | Frequency | 13 | 6 | 5 | 24 | 42 | | Angle |  |  |  |  |  |   http://www.mathster.com/course/simgs/36710215650_1.png | [1] |
| **7)** The table below shows the favourite car brands of 60 people. Calculate the angle for each colour and construct a pie chart.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Colour | Mercedes | BMW | Audi | Ford | VW | | Frequency | 7 | 2 | 2 | 15 | 34 | | Angle |  |  |  |  |  |   http://www.mathster.com/course/simgs/36710215650_2.png | [1] |

**Solutions for the assessment Pie Charts**

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| **1)** 30 | **2)** 7 |
| **3)** a) walk, b) 1/10, c) 30 | **4)** a) bicycle, b) 88 °, c) 13/90, d) 90 |
| **5)** black = 36 °, red = 24 ° blue = 24 °, green = 96 °, pink = 180 ° | **6)** green = 52 °, pink = 24 ° black = 20 °, blue = 96 °, red = 168 ° http://chart.apis.google.com/chart?cht=p&chd=t:13,6,5,24,42&chs=300x200&chl=green%7Cpink%7Cblack%7Cblue%7Cred |
| **7)** Mercedes = 42 °, BMW = 12 ° Audi = 12 °, Ford = 90 °, VW = 204 ° http://chart.apis.google.com/chart?cht=p&chd=t:7,2,2,15,34&chs=300x200&chl=Mercedes%7CBMW%7CAudi%7CFord%7CVW |  |