1. **These are the most popular dog profiles on Woofstagram. Put the profiles in order of**

most to least number of friends.

**Patch 9,242,234 friends**

**Jones 9,305,183 friends**

**Barkley 9,242,499 friends**

**Spaghetti 9,928,372 friends**

**Blue**

**9,340,392 friends**

**Peanut**

**8,099,999 friends**

**Bartholomew**

**9,410,592 friends**

**Tiny**

**9,411,829 friends**



1. **You are making an order for the school’s end of the year barbeque. There are 400 students attending. You must order enough food so each student can have a hotdog, hamburger and ice lolly, but most items are sold in packs so you may have extra. Which store should you get your supplies from to spend the least amount of money?**

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| **Item** | **Stop ‘n’ Shop** | **Snack Town** | **Gary’s Groceries** |
| **Hot dogs** | **25 for £1.49** | **30 for £1.50** | **12 for 99p** |
| **Hot dog buns** | **10 for £1** | **12 for £1.25** | **11p each** |
| **Hamburgers** | **10 for £1.99** | **24 for £4.49** | **12 for £2.49** |
| **Hamburger buns** | **12 for £1** | **10 for 80p** | **24 for £1.49** |
| **Ice lollies** | **24 for £2.50** | **12 for £1** | **10 for £1** |

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|  | **Flat rate (m)** | **Cost per hour (n)** | **Minimum booking (m + 2n)** | **3 hour booking (m + 3n)** | **4 hour booking (m + 4n)** |
| **Option 1** | **33.99** | **26.50** |  |  |  |
| **Option 2** | **34.99** | **25.50** |  |  |  |
| **Option 3** | **42.99** | **27.50** |  |  |  |
| **Option 4** | **39.99** | **24.50** |  |  |  |

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| **3. Leafy Grove Primary is planning a Walk-a-Thon to raise money for a local charity by**  **completing laps around their football field.** | | | | | | |
|  | **Year Group** | **Students in class** | **Fundraising plan for each student** | **Number of laps completed per student** | **Total raised by class** |  |
| **Year 1** | **28** | **get £5 for every 1 lap**  **2** | **9** |  |
| **Year 2** | **26** | **£5 for every 3 lap**  **4** | **15** |  |
| **Year 3** | **27** | **£7 for every lap** | **15** |  |
| **Year 4** | **23** | **£7 for every 1 1 lap**  **4** | **20** |  |
| **Year 5** | **29** | **£11 for every 1 3 laps**  **4** | **21** |  |
| **Year 6** | **22** | **£11 for every 2 laps** | **29** |  |
| **How many laps does the average student complete? (Round to 2dp) Which year group made the most money?**  **How much money does the school raise in total?** | | | | |  |
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| **4. JoJo the clown is assessing his business plan. His accountant has suggested four new price schemes for him to consider with the following notes:**   * **He currently charges clients a flat rate of £20 per party, plus £24.50 per hour he performs.** * **The minimum length of a booking must be 2 hours.** * **Each party costs him an average of £130 in supplies and travel costs.**   **How many hours does he currently have to work to make a profit?**  **Which option will allow him to make the biggest profit for a shorter booking?** | | | | | | |

1. **Martha wants to make some cookies for her mum’s birthday party. She’d like to test the recipe first, but she only has 180g of butter, so she won’t be able to make the full amount. How many cookies can she make with the ingredients she has in her pantry? Scale the recipe to show how much of each other ingredient she will need.**

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| **Ingredients for Chocolate Chip Celebration Cookies (makes 20)** |
| **225g caster sugar** |
| **200g butter** |
| **300g flour** |
| **1 teaspoon vanilla extract** |
| **1 teaspoon baking powder** |
| **1 egg** |
| **150g chocolate chips** |

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| **Amended recipe (makes )** |
| **180g butter** |

1. **The cookies were a big success! Martha has finalised the guest list and is going to make 150 cookies for the party. How much of each ingredient does she need?**

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| **Ingredients for Chocolate Chip Celebration Cookies (makes 20)** |
| **225g caster sugar** |
| **200g butter** |
| **300g flour** |
| **1 teaspoon vanilla extract** |
| **1 teaspoon baking powder** |
| **1 egg** |
| **150g chocolate chips** |

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| **Amended recipe (makes 150)** |
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She is going to buy some of her items in bulk. Which ingredients can she purchase in kilograms? Make the conversions, and round all decimals to two decimal points.

1. **These are the most popular dog profiles on Woofstagram. Put the profiles in order of**

most to least number of friends.

**Patch 9,242,234 friends**

**Jones 9,305,183 friends**

**Barkley 9,242,499 friends**

**Spaghetti 9,928,372 friends**

**Blue**

**9,340,392 friends**

**Peanut**

**8,099,999 friends**

**Bartholomew**

**9,410,592 friends**

**Tiny**

**9,411,829 friends**



Spaghetti, Tiny, Bartholomew, Blue, Jones, Barkley, Patch, Peanut

1. **You are making an order for the school’s end of the year barbeque. There are 400 students attending. You must order enough food so each student can have a hotdog, hamburger and ice lolly, but most items are sold in packs so you may have extra. Which store should you get your supplies from to spend the least amount of money?**

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| **Item** | **Stop ‘n’ Shop** | **Snack Town** | **Gary’s Groceries** |
| **Hot dogs** | **25 for £1.49** | **30 for £1.50**  **14 packs = £21.00** | **12 for 99p** |
| **Hot dog buns** | **10 for £1** | **12 for £1.25**  **34 packs = £42.50** | **11p each** |
| **Hamburgers** | **10 for £1.99** | **24 for £4.49**  **17 packs = £76.33** | **12 for £2.49** |
| **Hamburger buns** | **12 for £1** | **10 for 80p**  **40 packs = £32.00** | **24 for £1.49** |
| **Ice lollies** | **24 for £2.50** | **12 for £1**  **34 packs = £34.00** | **10 for £1** |

The items are the least expensive from Snack Town (£205.83).

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|  | **Flat rate (m)** | **Cost per hour (n)** | **Minimum booking (m + 2n)** | **3 hour booking (m + 3n)** | **4 hour booking (m + 4n)** |
| **Option 1** | **33.99** | **26.50** | **£86.99** | **£113.49** | **£139.99** |
| **Option 2** | **34.99** | **25.50** | **£85.99** | **£111.49** | **£136.99** |
| **Option 3** | **42.99** | **27.50** | **£97.99** | **£125.49** | **£152.99** |
| **Option 4** | **39.99** | **24.50** | **£88.99** | **£113.49** | **£137.99** |

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| **3. Leafy Grove Primary is planning a Walk-a-Thon to raise money for a local charity by**  **completing laps around their football field.** | | | | | | |
|  | **Year Group** | **Students in class** | **Fundraising plan for each student** | **Number of laps completed per student** | **Total raised by class** |  |
| **Year 1** | **28** | **get £5 for every 1 lap**  **2** | **9** | **£2,520** |
| **Year 2** | **26** | **£5 for every 3 lap**  **4** | **15** | **£2,600** |
| **Year 3** | **27** | **£7 for every lap** | **15** | **£2,835** |
| **Year 4** | **23** | **£7 for every 1 1 lap**  **4** | **20** | **£2,576** |
| **Year 5** | **29** | **£11 for every 1 3 laps**  **4** | **21** | **£3,828** |
| **Year 6** | **22** | **£11 for every 2 laps** | **29** | **£3,509** |
| **How many laps does the average student complete? (Round to 2dp) Which year group made the most money?**  **How much money does the school raise in total?** | | | | | **18.2 laps** |
| **Year 5** |
| **£17,868** |
| **4. JoJo the clown is assessing his business plan. His accountant has suggested four new price schemes for him to consider with the following notes:**   * **He currently charges clients a flat rate of £20 per party, plus £24.50 per hour he performs.** * **The minimum length of a booking must be 2 hours.** * **Each party costs him an average of £130 in supplies and travel costs.**   **How many hours does he currently have to work to make a profit? 5 hours Which option will allow him to make the biggest profit for a shorter booking?**  **Option 3 will make the most money over 4 hours.** | | | | | | |

1. **Martha wants to make some cookies for her mum’s birthday party. She’d like to test the recipe first, but she only has 180g of butter, so she won’t be able to make the full amount. How many cookies can she make with the ingredients she has in her pantry? Scale the recipe to show how much of each other ingredient she will need.**

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| **Ingredients for Chocolate Chip Celebration Cookies (makes 20)** |
| **225g caster sugar** |
| **200g butter** |
| **300g flour** |
| **1 teaspoon vanilla extract** |
| **1 teaspoon baking powder** |
| **1 egg** |
| **150g chocolate chips** |

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| **Amended recipe (makes 18)** |
| **202.5g caster sugar** |
| **180g butter** |
| **270g flour** |
| **0.9 teaspoon vanilla extract** |
| **0.9 teaspoon baking powder** |
| **0.9 egg** |
| **135g chocolate chips** |

1. **The cookies were a big success! Martha has finalised the guest list and is going to make 150 cookies for the party. How much of each ingredient does she need?**

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| **Ingredients for Chocolate Chip Celebration Cookies (makes 20)** |
| **225g caster sugar** |
| **200g butter** |
| **300g flour** |
| **1 teaspoon vanilla extract** |
| **1 teaspoon baking powder** |
| **1 egg** |
| **150g chocolate chips** |

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| **Amended recipe (makes 150)** |
| **1,687.5g caster sugar** |
| **1,500g butter** |
| **2,250g flour** |
| **7.5 teaspoons vanilla extract** |
| **7.5 teaspoons baking powder** |
| **7.5 eggs** |
| **1,125g chocolate chips** |

She is going to buy some of her items in bulk. Which ingredients can she purchase in kilograms? Make the conversions, and round all decimals to two decimal points.

1.69kg caster sugar, 1.5kg butter, 2.25kg flour, 1.13kg chocolate chips