Pies and Inequalities: Show Your Work

Write an inequality for each scenario (verbal problem). Then solve each inequality.

| Verbal Problem | | Your Work |
| --- | --- | --- |
| 1) | A plain medium pizza costs $12, and each additional topping cost $2. Malia’s budget for the pizza is no more than $22 |  |
| 2) | Jorge has a budget of less than $50 for the entry fee and supplies for the pie-baking contest.  The entry fee is $10 and the supplies cost $8 per pie. |  |
| 3) | Devon is making chicken pot pies for an upcoming party with at least 50 expected guests. Ten people are vegetarians and will not eat the chicken pot pies, and each chicken pot pie serves 8 people. |  |
| 4) | Zsarika needs more than 22 hours to make her world-famous lemon meringue pie if she streams movies as she works. She has already been working for 12 hours and wants to watch as many 2-hour movies as possible with the time she has left. |  |
| 5) | Grace steps in a cow pie 11.5 feet away from the south fence. The north fence is at least 25 feet away from the south fence, and she travels 2 feet with each step she takes. |  |
| 6) | Dev and Bri have been working for more than an hour assembling moon pies. It took 6 minutes to gather the supplies and 8 minutes per moon pie to layer the ingredients and coat them in chocolate. |  |
| 7) | Noelle has $25 to spend on pizza. She wants to buy a cheese pizza with extra toppings. The cheese pizza costs $8, each extra topping is $2, and Noelle plans to leave a $3.50 tip. |  |
| 8) | The pie eating contest cannot accommodate 60 or more contestants. Six people have already registered and now there are 8 people per day registering. |  |

Pies and Inequalities: Your Results

Find the signs that match each given scenario. Write the letters in the corresponding columns.

| Verbal Problem | | Algebraic Problem | Algebraic Solution | Visual Solution |
| --- | --- | --- | --- | --- |
| 1) | A plain medium pizza costs $12, and each additional topping cost $2. Malia’s budget for the pizza is **no** more than $22 |  |  |  |
| 2) | Jorge has a budget of lessthan $50 for the entry fee and supplies for the pie-baking contest.  The entry fee is $10 and the supplies cost $8 per pie. |  |  |  |
| 3) | Devon is making chicken pot pies for an upcoming party with at least 50 expected guests. Ten people are vegetarians and will not eat the chicken pot pies, and each chicken pot pie serves 8 people. |  |  |  |
| 4) | Zsarika needs more than 22 hours to make her world-famous lemon meringue pie if she streams movies as she works. She has already been working for 12 hours and wants to watch as many 2-hour movies as possible with the time she has left. |  |  |  |
| 5) | Grace steps in a cow pie 11.5 feet away from the south fence. The north fence is at least 25 feet away from the south fence, and she travels 2 feet with each step she takes. |  |  |  |
| 6) | Dev and Bri have been working for more than an hour assembling moon pies. It took 6 minutes to gather the supplies and 8 minutes per moon pie to layer the ingredients and coat them in chocolate. |  |  |  |
| 7) | Noelle has $25 to spend on pizza. She wants to buy a cheese pizza with extra toppings. The cheese pizza costs $8, each extra topping is $2, and Noelle plans to leave a $3.50 tip. |  |  |  |
| 8) | The pie eating contest cannot accommodate 60 or more contestants. Six people have already registered and now there are 8 people per day registering. |  |  |  |