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***2018 OWLympiad – Quizzo Practice***

*May 16, 2018*

*Rules*

* This is a team exam of 8 questions
* Write your answers on the sheet provided. There is one answer sheet for your team.
* We will read out the question, then read out the question again. We will pause for one minute as you work. We will read out the question one more time and then give you one more minute to work. And then we will move on to the next question.
* You may not use a calculator.
* Please put away your cell phones. You may not use your cell phone during the exam.

1. 3 mangos and 7 pineapples cost $22, while 5 mangos and 2 pineapples cost 12.50.  If the cost of every mango is the same and if the cost of every pineapple is the same, what is the combined cost of 4 mangos and 4 pineapples?

2. Six years ago, Belle was three times as old as Julia. Six years from now, Belle will be five-thirds as old as Julia. How old is Julia today?

3. Farmer Frank wants to create an enclosed rectangular area where his chickens can roam freely. He plans to place this area adjacent to a large barn so that he only needs to fence three sides. If Farmer Frank wants the area to be 50 square feet large, what is the minimum amount of fence that he will need?

4. Nancy and Kate are 500 feet apart and begin walking towards each other, each at a constant speed. Kate walks 75 ft/min. Their dog is standing next to Kate, and when Kate starts to walk toward Nancy, the dog runs toward Nancy at 300 ft/min. When the dog meets Nancy, it turns around immediately and runs back at the same speed to Kate, and so forth until all three meet. In total, the dog runs 1200 ft. What is Nancy’s walk speed?

5. Temple University is giving out free sub sandwiches. Everyone has a choice to make their sub. There are 4 options for the kinds of bread: multigrain, Italian, rye and flatbread. There are 6 options for toppings: lettuce, tomatoes, cheese, onion, bell pepper and pickles. How many different subs can a person choose from, using one type of bread and at least one topping?