

These questions are due by the end of the week. 10/10 points towards your assessment grade if you get them all right and have the math work on paper to back up your work.

You will receive zero points and fail the assignment if you are asked for your work on paper and can not produce that effort. Missing some part of the assignment will cause a loss of that percent of the overall assignment.

These weekly problems cannot be attempted a second time and the work must be turned in on time, not later in the day, not during remediation, and not the next day.

You should work on these problems throughout the week and use down time in class to work with your teams on the solution to these problems.

1. Systems of equations can be solved most efficiently using one of three strategies; graphing, substitution, or elimination. Describe below the type of problem that is best for each particular strategy and given an example of when you would and when you wouldn't use each strategy.

Graphing is best when...

Here is an example of a problem that is best solved with graphing.

Here is an example of a problem that would be awful to solve using graphing.

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Substitution is best when...

Here is an example of a problem that is best solved with substitution.

Here is an example of a problem that would be awful to solve using substitution.

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Elimination is best when...

Here is an example of a problem that is best solved with elimination.

Here is an example of a problem that would be awful to solve using elimination.

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2.

**Standard A1.1.2.2.1**

Anna burned 15 calories per minute running for  $x$  minutes and 10 calories per minute hiking for  $y$  minutes. She spent a total of 60 minutes running and hiking and burned 700 calories. The system of equations shown below can be used to determine how much time Anna spent on each exercise.

$$15x + 10y = 700$$

$$x + y = 60$$

What is the value of  $x$ , the minutes Anna spent running?

- A. 10
- B. 20
- C. 30
- D. 40

3.

**Standard A1.1.2.2.2**

Samantha and Maria purchased flowers. Samantha purchased 5 roses for  $x$  dollars each and 4 daisies for  $y$  dollars each and spent \$32 on the flowers. Maria purchased 1 rose for  $x$  dollars and 6 daisies for  $y$  dollars each and spent \$22. The system of equations shown below represents this situation.

$$5x + 4y = 32$$

$$x + 6y = 22$$

Which statement is true?

- A. A rose costs \$1 more than a daisy.
- B. Samantha spent \$4 on each daisy.
- C. Samantha spent more on daisies than she did on roses.
- D. Samantha spent over 4 times as much on daisies as she did on roses.