Show your work for full marks! Remember that you can check all of your answers! You may use any method that you wish.

/35

1) For the following two-step equations, complete the table **fully**. ➄ each.

|  |  |
| --- | --- |
| Equation: |  |
| Collect the variable terms: |
| Collect the constant terms: |
| Divide: |
| Am I Right? | |

b)

|  |  |
| --- | --- |
| Equation: |  |
| Collect the variable terms: |
| Collect the constant terms: |
| Divide: |
| Am I Right? | |

c)

|  |  |
| --- | --- |
| Equation: |  |
| Collect the variable terms: |
| Collect the constant terms: |
| Divide: |
| Am I Right? | |

d)

|  |  |
| --- | --- |
| Equation: |  |
| Collect the variable terms: |
| Collect the constant terms: |
| Divide: |
| Am I Right? | |

2) Solve any six of the following equations. You can rearrange first if you’d like. You do not need to show Mr. Smith a check to your answer. You can use any method that you prefer. ➂ each

a) b) c)

d) e) f)

g) h) i)

3) Mr. Smith and his clan mate are doing some raiding for dark elixir (so they can upgrade their heros). They each started with a certain amount of dark elixir, and they each steal a certain amount of dark elixir each hour:

Mr. Smith: Starts with 10,000 dark elixir and makes 4,500 dark elixir every hour.

His Friend: Starts with 25,000 dark elixir and makes 2,000 dark elixir every hour.

Here is an equation that models Mr. Smith’s dark elixir:

a) Can you make an equation that models his friend’s dark elixir?

b) How much dark elixir does each person have after 4.5 hours of raiding?

Mr. Smith: Friend:

Another friend of Mr. Smith’s has 40,000 to start with, and steals 3,000 every hour.

c) Solve the following equation:

d) How many hours will it take until they have the same amount of dark elixir?