Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer the following algebra questions based on the video you just saw. Type answers in the text box below each question.

1. In the equation 3X +2 =8, type the two steps needed to get X by itself.

|  |
| --- |
|  |

1. When a fraction is followed by a variable, does the variable go with the numerator or the denominator?

|  |
| --- |
|  |

1. In your own words, describe what combining like terms means.

|  |
| --- |
|  |

1. Is it possible to solve an equation in variable form? Or do you have to have numbers?

|  |
| --- |
|  |

1. Solve for x in the following equation, write your answer in the space provided.

$$\frac{2}{3}x+4=22$$

|  |
| --- |
|  |

**Algebra Review Practice**

For questions 1-3, solve for x: show all work on a separate sheet of paper, take a picture, and insert in the box below each question

1. 5X +10 = 20

|  |
| --- |
| your response here |

1. 8X +30 = 6X -12

|  |
| --- |
| your response here |

1. $\frac{2}{3}x-4=-38$

|  |
| --- |
| your response here |

For questions 4-7, solve each equation for the chosen variable. Show all work on a separate sheet of paper, take a picture, upload in space provided

1. $v=\frac{d}{t}$ solve for t:

|  |
| --- |
| your response here |

1. $a= \frac{∆v}{t}$ solve for $∆v$:

|  |
| --- |
| Your response here |

1. $v\_{f}=v\_{i}+at$ solve for a:

|  |
| --- |
| your response here your response here |

1. $v\_{f}^{2}=v\_{i}^{2}+2ad$ solve for d:

|  |
| --- |
| your response here |

For questions eight through 10 solve each equation for the chosen variable, then substitute the variables for what’s given including units, then evaluate. Show all work on a separate sheet of paper take a picture and upload in the space provided

1. Solve for Δv in variable form first, then substitute the numbers including units and evaluate Δv. **( hint: the answer’s units are in m/s )**

$a=\frac{∆v}{t}$ where a = 3m/s2, t = 6s

|  |
| --- |
| your response here |

1. Solve for vi in variable form first, then substitute the numbers including units and evaluate vi. **( hint: the answer’s units are in m/s )**

$v\_{f}=v\_{i}+at$ where a = 3m/s2, t = 6s, vf =24 m/s

|  |
| --- |
| your response here |

1. Solve for d by substituting the values given. See if you can figure out the correct unit.

$d=v\_{i}t+\frac{1}{2}at^{2}$ where $v\_{i}$ = 2m/s, t = 2s, a = 2m/s2

|  |
| --- |
| your response here |

1. ***This is a bonus, try and solve this problem in variable form only show all work, take a picture, and upload in the space provided.***

$d= v\_{i}t+\frac{1}{2}at^{2}$ ***solve for t: “ If you can”***

|  |
| --- |
|  |