**KHAN ACADEMY PILOT YEAR 2**

**Instruction on how to set a goal:**

* Sign in to khanacademy.org
* On the top right corner of the website you see your name, select ‘Profile’ with the drop down button.
* In the menu on the left, go to Goals (beta)
* Press the button: create a new goal and choose “custom goal”
* Go to the tab: choose videos and add all the videos
* Go to the tab: choose skills and select the exercises of the goal.
* Then press create new goal.
* Change the title of the goal to the name of the goal you’re working on.

**GOAL 1: Refresh**

Video

Example: evaluate a formula using substitution (1:15 minutes)

One-step equation intuition (4:39 minutes)

Why we do the same thing to both sides: two-step equations (5:12 minutes)

Adding and subtracting the same thing from both sides. (2:09 minutes)

Combining like terms (4:33 minutes)

Exercises:

 Evaluating expressions in one variable

 One step equations with multiplication

 Two-steps equations

Combining like terms with distribution

**Goal 2: equations**

## Video

Solving Ax+B=C (8:41 minutes)

Exercises:

 Writing expressions

 Writing expressions 2

Video:

 Why we do the same thing to both sides: multi-step equations (7:36 minuten)

Variables on both sides (8:53 minutes)

Example 1: variables on both sides (4:33 min)

Equation Special Cases (1:55 minutes)

Exercises

Equations with variables on both sides

Linear word problems

Multi-step equations

Modern Mathematics BOOK 2B: questions 6 and 7

**GOAL 3: simplifying complicated equations**

Video:

 Ex 1 Multi - step equation (3:11 minutes)

 Ex2 Multi-step equation (3:24 minutes)

Solving Equations with the distributive property (6:04 minutes)

 Solving Equations with the distributive proberty (4:50 minutes)

Exercises:

 Multi-step equations

Multistep equations with distribution

Modern Mathematics BOOK 2B: questions 15

**GOAL 4: (super fast systems of equations)**

Video:

Equations of a line 2 (3:57 minutes)

Equations of a line 3 (6:42)

Solving linear systems by graphing (8:30 minutes)

Solving linear systems by substitution (9:21 minutes)

Exercises:

 Slope –intercept form (slope = gradient)

Graphing systems of Equations

 Systems of equations with substitution

Modern mathematics: do exercises 21, 24 and 25

**GOAL 5: Inequalities**

Video:

Inequalities on a number line (1:34 minutes)

Inequalities using addition and subtraction (7:48 minutes)

Inequalities using multiplication and division. (10:27 minutes)

Solving inequalities (4:32 minutes)

Exercises:

 Inequalities on a number line

 One step inequalities

 Multi-step linear inequalities

Modern mathematics: do exercises 33 and 34

 **\*\*GOAL 6: Age word problems**

Video:

Ex1 age word problem (5:21 minutes)

Ex 2 Age word problem (3:43 minutes)

Exercises:

Age word problems

**\*\* GOAL 7: Systems of equations using Elimination**

Video:

King’s cupcakes: solving systems by Elimination (9:00 minutes)

Solving systems of equations using multiplication

Exercises:

\* System of equations

 \* System of equation word problems

 \* Solving systems of equation using Elimination

**\*\*\* GOAL 8:**

Video:

 Linear equations in point slope form (9:38 minutes)

 Linear equations in Standard form

 Point-Slope and standard form

Exercises:

 Converting between slope-intercept and standard form

 Converting between point-slope and standard form

 Finding the equation of a line