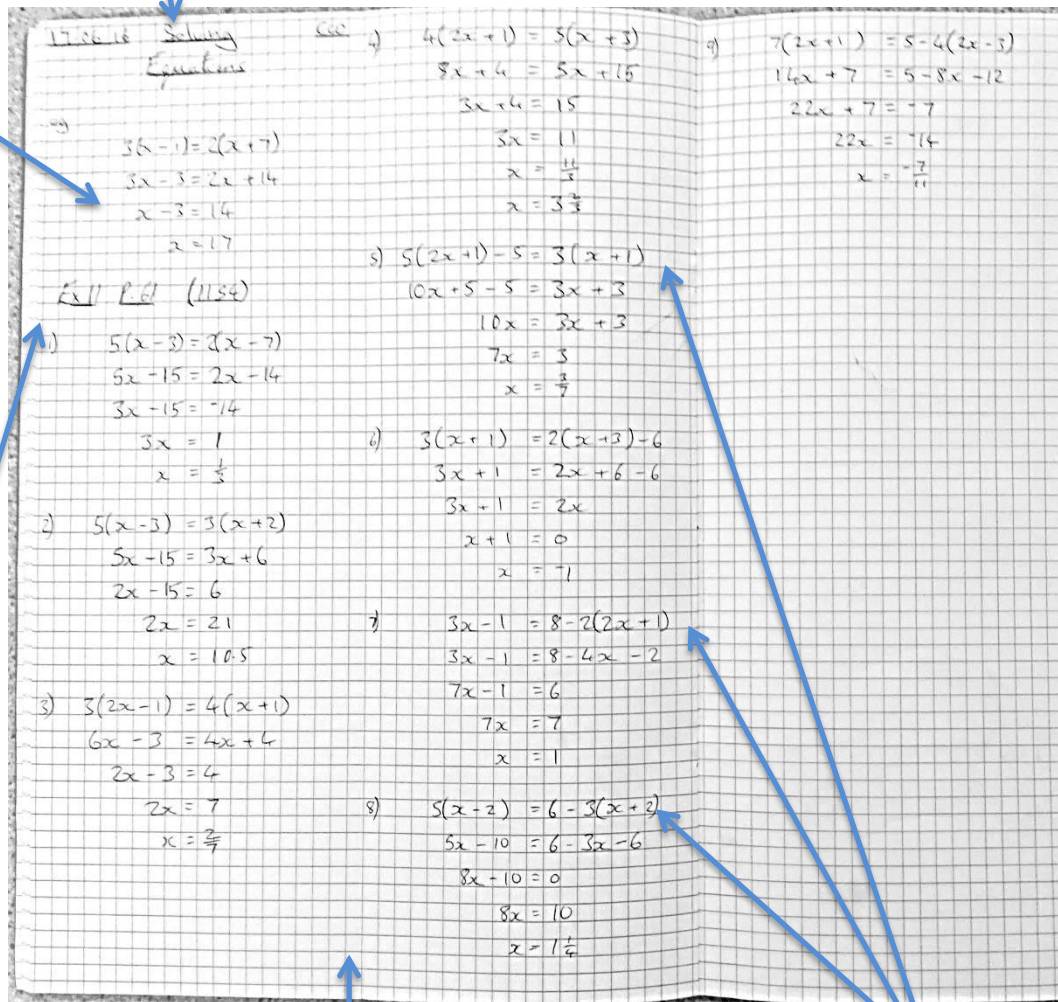


# Take Pride in Your Work

Underline Date & Titles

In many Maths lessons the teacher will model a question.

Write the exercise number, page number and MyMaths search code where possible.



Most Maths work, works down, so use half pages where possible.

Space your work out logically so that it is all readable.

You do not have to have the best handwriting in the world for your book to look good.

Students who have good looking book work, naturally make their exam papers look good too. This is important as an examiner that does not know you will be reading your GCSE paper one day. They rightly or wrongly give more time to a paper that is neat.

This page may look pretty good but it is not giving the author the best chances of remembering the work and helping them to revise. Please see next slide.

# Take Pride in Your Work

17.06.16 Solving Equations CCO

eg

$$3(x-1) = 2(x+7)$$
$$3x - 3 = 2x + 14$$
$$x - 3 = 14$$
$$x = 17$$

Simply copying the example from the board means you have lost all of the verbal or written explanation that the teacher gives.

17.06.16 Solving Equations CCO

eg

$$3(x-1) = 2(x+7)$$

Unknowns to one side.

$$3x - 3 = 2x + 14$$
$$x - 3 = 14$$
$$x = 17$$

Expanding Brackets

Solve

These might be instructions that the teacher gave on the board or spoke of verbally. By writing these down, you have better notes for revision and you are more likely to remember to topic anyway.

If the teacher or even a friend says something that suddenly helps you to make sense of the problem in the lesson then add it to your example. Why not use a highlighter or different colours?

17.06.16 Solving Equations CCO

eg

$$3(x-1) = 2(x+7)$$

Unknowns to one side.

$$3x - 3 = 2x + 14$$
$$x - 3 = 14$$
$$x = 17$$

Expanding Brackets

Solve

AKIA: Multiply out brackets



# Take Pride in Your Work

3)  $3(2x-1) = 4(x+1)$   
 $6x - 3 = 4x + 4$  ✓  
 $2x - 3 = 4$  ✓  
 $2x = 7$  ✓  
 $x = \frac{7}{2}$  X

Wow?  
 I put  $\div 7$   
 not  $\div 2$ .  
 should be  
 $\frac{7}{2} = 3.5$

6)  $3(x+1) = 2(x+3) - 6$   
 $3x + 1 = 2x + 6 - 6$   
 $3x + 1 = 2x$   
 $x + 1 = 0$   
 $x = -1$  X

Wow?  
 I forgot  
 to multiply  
 the 1 by 3.

9)  $7(2x+1) = 5 - 4(2x-3)$   
 $14x + 7 = 5 - 8x - 12$   
 $22x + 7 = -7$   
 $22x = -14$   
 $x = -\frac{7}{11}$  X

Wow?

$-4x - 3 = 12$   
 not  
 $-12$

"If I ran a school, I'd give all the average grades to the ones who gave me all the right answers for being good parrots. I'd give the top grades to those who made lots of mistakes and told me about them and then told me what they had learned from them."

**Buckminster Fuller, Inventor**

"What Went Wrong" comments are a fantastically powerful learning opportunity in Mathematics. Simply marking work and leaving it misses this opportunity to find out about your mistakes and learn by them. We learn 95% of what we teach so please explain "What Went Wrong" with as many mistakes as you possibly can.

# Take Pride in Your Work

17.06.16 Solving Equations

CW  
AKA: Multiply out brackets

eg

$$3(x-1) = 2(x+7)$$

$$3x - 3 = 2x + 14$$

$$x - 3 = 14$$

$$x = 17$$

Unknowns to one side.  
Majority rules

Expanding Brackets

Solve

Ex 11 p. 61 (1154)

1)  $5(x-3) = 2(x-7)$

$$5x - 15 = 2x - 14$$

$$3x - 15 = -14$$

$$3x = 1$$

$$x = \frac{1}{3}$$

2)  $5(x-3) = 3(x+2)$

$$5x - 15 = 3x + 6$$

$$2x - 15 = 6$$

$$2x = 21$$

$$x = 10.5$$

Wow? I forgot to multiply the 1 by 3.

$$4(2x+1) = 5(x+3)$$

$$8x + 4 = 5x + 15$$

$$3x + 4 = 15$$

$$3x = 11$$

$$x = \frac{11}{3}$$

$$x = 3\frac{2}{3}$$

3)  $5(2x+1) - 5 = 3(x+1)$

$$10x + 5 - 5 = 3x + 3$$

$$10x = 3x + 3$$

$$7x = 3$$

$$x = \frac{3}{7}$$

6)  $3(x+1) = 2(x+3) - 6$

$$3x + 1 = 2x + 6 - 6$$

$$3x + 1 = 2x$$

$$x + 1 = 0$$

$$x = -1$$

7)  $3x - 1 = 8 - 2(2x + 1)$

$$3x - 1 = 8 - 4x - 2$$

$$7x - 1 = 6$$

g)

$$7(2x+1) = 5 - 4(2x-3)$$

$$14x + 7 = 5 - 8x - 12$$

$$22x + 7 = -7$$

$$22x = -14$$

$$x = -\frac{7}{11}$$

$$-4x - 3 = 12$$

not -12

Wow?

X

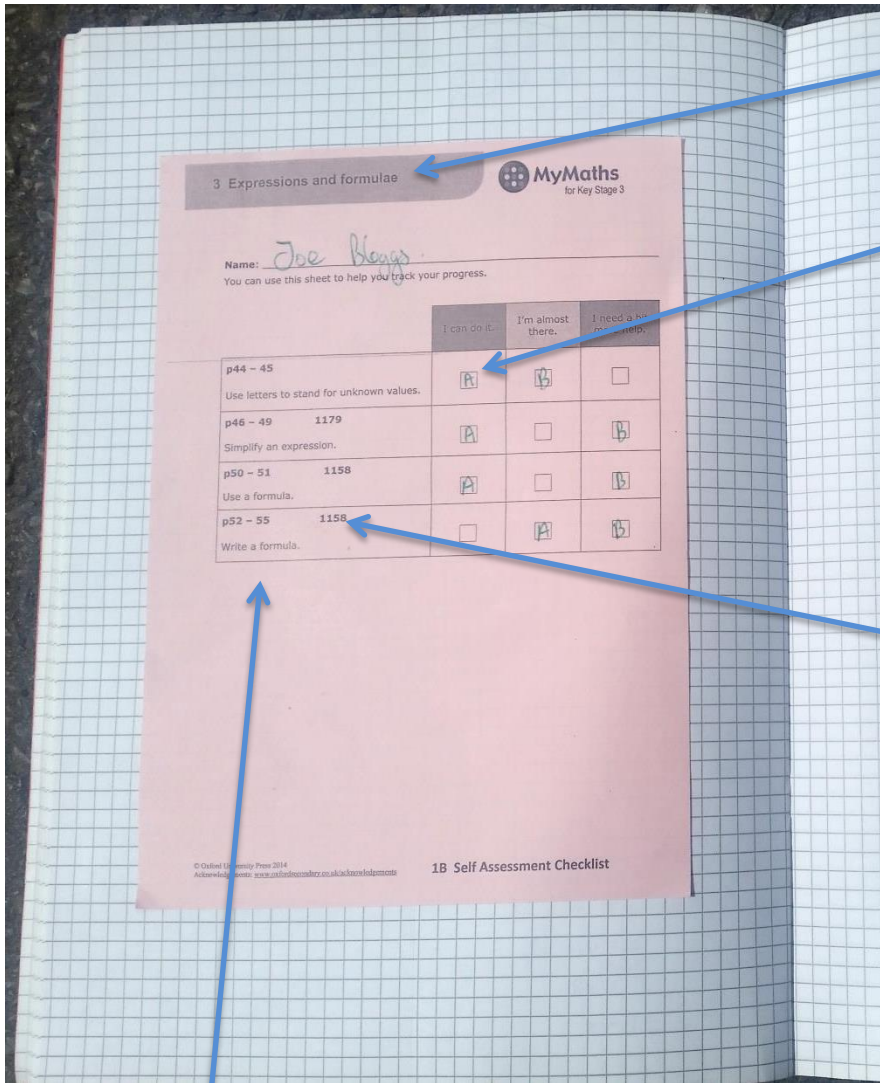
18.06.16

Solving Equations Rehman

CW

Before you start next lesson please rule off your lesson's work and begin next lesson with the date, title and CW for classwork or HW for homework.

# Take Pride in Your Work



**KS3 students** will have one of these self assessment sheets at the start of every unit they do.

Students will put a 'B' for before and an 'A' for after the unit has been taught in the box that best describes how they feel about a topic.

These four digit codes can be used to search for online lessons in [mymaths.co.uk](http://mymaths.co.uk) which will aid with revision.

The page numbers take the student to the relevant page in their online textbook on [Kerboodle.com](http://Kerboodle.com)

This is another great way for students to look for topics to revise before any assessment.