

Y10 Maths Weekly Task Grid – Week commencing 29th June

This week's topic focus is **Completing the Square**. Please complete all 4 tasks.

Starter:**ESTIMATION AND BOUNDS**

a) Estimate:

$$\frac{31.7 \times 416.5}{18.6}$$

- b) A number y , rounded to two decimal places is 4.13. Write down the error interval for y .

QUADRATICS/ INEQUALITIES

a) Complete the square:

$$x^2 - 4x + 8$$

- b) Hence, find the coordinate of the vertex of:
- $$y = x^2 - 4x + 8$$

PROBABILITY/ COMBINATIONS

A bag contains 5 red and 7 yellow sweets. Julie takes a sweet at random, eats it, then takes a second sweet and eats it. Find the probability that she eats two yellows.

SIMULTANEOUS EQUATIONS

Solve:

$$\begin{aligned} 2x + 5y &= 8 \\ 3x + 7y &= 11 \end{aligned}$$

I have enlarged this below.

Video on how to do it

You can choose which video you want to watch to show you how to do completing the square

[Completing the Square Video - Corbett Maths](#)

[Completing the square video - Maths Genie](#)

[Completing the square revision notes - Maths Genie](#)

[Completing the square My Maths Lesson](#)

As a top set I want you lot to push yourselves with this; make sure you're alright with as many aspects of Completing the Square as possible.

Practice Questions

You can choose which questions you want to use to practice. The links to the answers are also provided so you can check them when you are finished.

[Completing the square My Maths Online Homework](#)

[Completing the square textbook exercise - Corbett Maths](#)

[ANSWERS - Corbett Maths](#)

[Completing the square practice questions - Corbett Maths](#)

[ANSWERS - Corbett Maths](#)

[Completing the square exam style questions - Maths Genie](#)

[ANSWERS - Maths Genie](#)

Exam Question (Higher):

On the next page is an exam question for you to have a go at...

1 Write the following in the form $(x + a)^2 + b$ where a and b are integers: (Level 6)

1(a) $x^2 + 4x + 5$

[2 marks]

Answer _____

1(b) $x^2 - 14x - 1$

[2 marks]

Answer _____

1(c) $x^2 - 24x + 5$

[2 marks]

Answer _____

Turn over for next question

<p><u>ESTIMATION AND BOUNDS</u></p> <p>a) Estimate:</p> $\frac{31.7 \times 416.5}{18.6}$ <p>b) A number y, rounded to two decimal places is 4.13. Write down the error interval for y.</p>	<p><u>PROBABILITY/ COMBINATIONS</u></p> <p>A bag contains 5 red and 7 yellow sweets. Julie takes a sweet at random, eats it, then takes a second sweet and eats it. Find the probability that she eats two yellows.</p>
<p><u>QUADRATICS/ INEQUALITIES</u></p> <p>a) Complete the square:</p> $x^2 - 4x + 8$ <p>b) Hence, find the coordinate of the vertex of:</p> $y = x^2 - 4x + 8$	<p><u>SIMULTANEOUS EQUATIONS</u></p> <p>Solve:</p> $\begin{aligned} 2x + 5y &= 8 \\ 3x + 7y &= 11 \end{aligned}$