

My Dirt Time

Summer Term
(May Exam)



Name: _____

WWW:

EBI:

Expand and simplify

1) $3(a + 5)$

2) $3(2a + b) - 4b$

3) $(x + 5)(x - 4)$

Factorise fully

1) $18x - 12$

1) $6x^2 - 15x$

Bronze 

Calculate the area and circumference of a circle with a diameter of 15cm. (Clearly label your answers and give your answer to one decimal place)

Bronze 

Change the subject for y

1) $xy = t$

2) $\frac{y}{r} = tp$

3) $u^2 = p^2y$

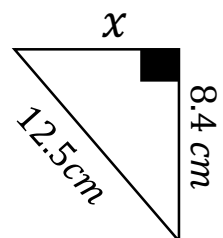
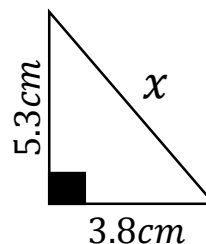
4) $py - m = r$

5) $ty + p^2 = u^2$

Silver 

www.missbsresources.com

Using Pythagoras theorem calculate the missing lengths.



Silver 

Name: _____

Estimate the mean height of the tomato plants.


Height (cm)	Frequency	Mid P	fx
$0 \leq h < 10$	8		
$10 \leq h < 30$	17		
$30 \leq h < 40$	15		
$40 \leq h < 50$	10		

$$\text{Mean} = \frac{\sum fx}{\sum f}$$

Gold 

The equation $x^3 + 3x = 111$ has a solution between 4 and 5. Use Trial and improvement to find this solution. Give your answer to 1 d.p.

x value	$x^3 + 3x$	Big/Small

$x = \underline{\hspace{2cm}}$ Gold 

3 cakes and 2 coffees cost £8.50.
5 Cakes and 4 coffees cost £15.50.
Calculate the cost of a cake and coffee?

Gold 

Factorise fully
 $x^2 + 4x + 3$

Now find the solutions for
 $x^2 + 4x + 3 = 0$

Gold 

Mr P goes for a bike ride. He rides 45 miles in 1 hour and 15 minutes. Calculate Mr P's average speed.

Platinum 

Calculate
1) $\sqrt{5} \times \sqrt{7}$

2) $\sqrt{3}(4 - \sqrt{7})$

3) $(5 + \sqrt{3})(7 + \sqrt{3})$

Rationalise the denominator

$$\frac{5}{\sqrt{7}}$$

Platinum 