



MR DOIG'S CHRISTMAS REVISION SHEET NATIONAL 5 MATHS

Non Calculator Questions

1. Work out the answer to $3 - \left(\frac{1}{5} + \frac{2}{3}\right)$ 2

2. Evaluate $2\frac{5}{8} \div 1\frac{3}{4}$ 2

3. Coffee is on special offer at the local supermarket.

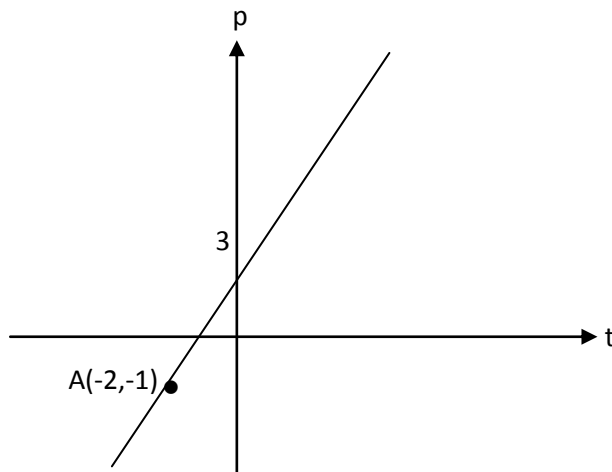


Each tin on special offer contains 20% more coffee than the normal jar.

A tin on special offer contains 720g of coffee.

How much coffee does the normal jar hold? 3

4.



Find the equation of the straight line in terms of p and t. 3

5. (a) Express $\frac{b^{\frac{1}{2}} \times b^{\frac{3}{2}}}{b}$ in its simplest form. 2

(b) Express $\frac{3}{\sqrt{5}}$ as a fraction with a rational denominator. 2

Calculator Questions

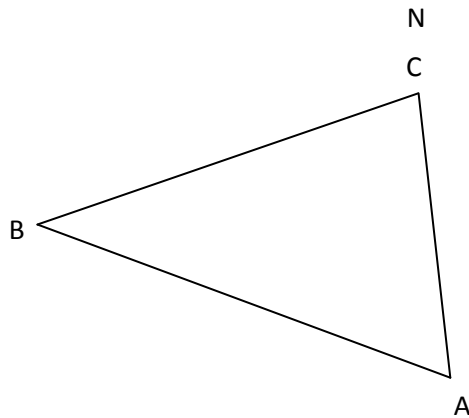
6. Six lemons are weighed. Their weights are:

110g, 122g, 118g, 115g, 120g, 117g

Calculate the **mean** and **standard deviation** of this data.

4

7. A rectangular plot of farmland, ABC, to be ploughed is shown below.



Find the area of the field if $AB = 12.6$ metres, $AC = 10$ metres and angle $BAC = 72^\circ$

2

8. Miss McLeod has just bought a brand new car costing £17 500.

During the first year the value of the car is predicted to fall by 14%.

It then drops at a rate of 6.5% every successive year thereafter.

How much is the car worth after 4 years? Give your answer correct to **2 s.f.**

5

9. Multiply out the brackets and simplify

$$8 - 3(4x - 5) + 6x$$

3

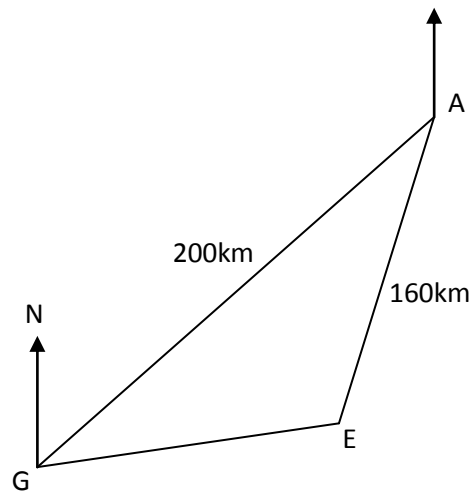
10. (a) Factorise fully $8x^2 - 18$

2

- (b) Factorise $p^2 + 11p + 24$

2

11. The diagram below shows the positions of three airports A, E and G.



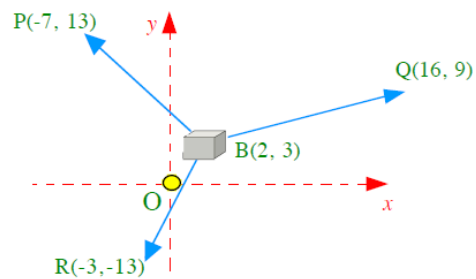
G is 200 kilometres from A whilst E is 160 kilometres from A.

From G the bearing of A is 052° From A the bearing of E is 216° .

How far apart are airports G and E?

6

12. Three ropes are tied to a box and three boys pull the ropes in various directions as shown below:



(a) Find component values of \overrightarrow{BP} , \overrightarrow{BQ} and \overrightarrow{BR}

3

(b) Find $|\overrightarrow{BP}|$

2