

Revision Materials



Name _____ Class _____

1. Factorise the following to the fullest extent.

$12x + 9$

$3(4x + 3)$

$6xy - 15x$

$3x(2y - 5)$

$6x^2 - 8x$

$2x(3x - 4)$



3 marks

2. Expand and simplify the following.

$4(x + 9)$

$4x + 36$

$3x(x - 7)$

$3x^2 - 21x$

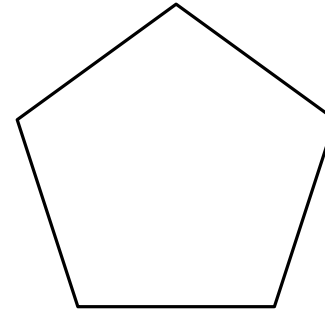
$4(2x - 5y) + 3(4x + 2y)$

$8x - 20y + 12x + 6y = 20x - 14y$

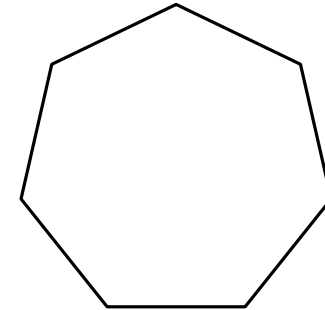


4 marks

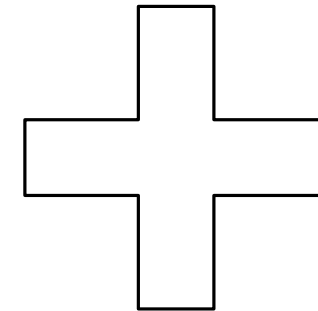
3. Find the sum of the internal angles.



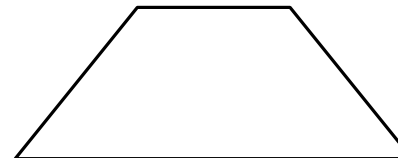
$180(5-2) = 540$



$180(7-2) = 900$



$180(12-2) = 1800$

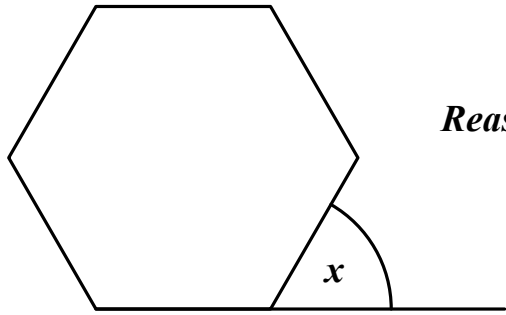


$180(4-2) = 360$



8 marks

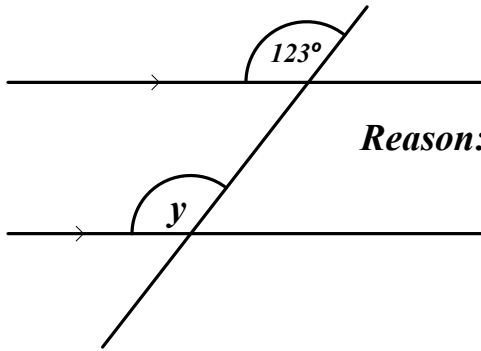
4. Find the angles and state your justification.



$$x = 60$$

Reason:

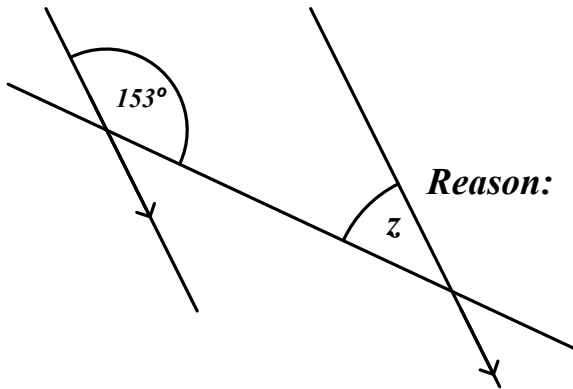
Exterior angles $360/6$



$$y = 123$$

Reason:

Corresponding angles are equal



$$z = 27$$

Reason:

Co-interior angles total
180 degrees



6 marks

5. The table below shows the scores of some contestants in an online game.

Score	Frequency
12	17
13	13
14	14
15	13
16	7

How many people played the game?

64 (add the frequencies)

What is the mode score?

12 (score with the highest frequency)

What is the median score?

14 (score with the middle number ie 32nd number)

What is the mean score?

13.6875 (multiply each score by its frequency, add them together and divide by 64)

What is the range of the scores?

$$16 - 12 = 4$$



5 marks

6. Alison, Billy and Charlie share some sweets in the ratio 4:9:6. Alison gets 20 sweets. How much do the others get?

Billy 45
Charlie 30

7. The ages of David, Ella and Fred can be written as a ratio 7:9:12. If the total of their ages is 56 years, how old is each person?

David 14
Ella 18
Fred 24

8. Gareth, Harry and Iona were paid last week. They were paid in the ratio 6:11:10. Harry was paid £75 more than Gareth. How much was each person paid?

$11 - 6 = 5$

$75 / 5 = 15$

one part = £15

Gareth £90
Harry £165
Iona 150

2 marks

3 marks

3 marks

9. The exchange rate for the UK and Australia is GBP £1 : AU\$ 1.9

How many AU\$ would you get for £600?

AU\$ 1140

How many GBP would you get for AU\$1500?

GBP £789.47

2 marks

10. The exchange rate between the Singapore dollar and the Norwegian Krone is \$1:7.88Kr

How many Singapore dollars would you get for 1200 Kr?

Sing \$ 152.28

How many Kr would you get for Sing \$25?

Norwegian Kr 197

2 marks

11. Billy starts with £300. He invests wisely and his money appreciates by 12%. Then, there is a crash and his money goes down by 12%. How much money has he now?

$300 \times 1.12 = 336$

$336 \times 0.88 =$

Billy has 295.68

3 marks



12. Tilly bought a car for £12,500 + 20% VAT. How much did Tilly's car actually cost her?

Tilly's Car Cost £15000

2 marks

13. At a Leeds United game, there were 23580 supporters of which 72% were home supporters. How many supporters were away supporters?

Away Supporters 6,602 to nearest whole

2 marks

14. British Airways were having a sale for flights. All flights were reduced by 15%. If the flight to Australia now cost £1450, what was the original price?

$$1450 / 85 = 17.05882353$$

$$17.05882353 \times 100 = £1705.88$$

Flight Price £ 1705.88

2 marks

14. Hayley saved £8,500. She put it in a bank account that paid a rate of 4.9% interest per annum. Assuming that she did not withdraw any money, how much would she have in her account after seven years?

$$8500 \times 1.049^7 = £11,880.85$$

Total Amount £ 11,880.85
(to the nearest penny)

3 marks



achildsguideto

TOTAL