

BLOCK 3 TEST

TIME: 45 minutes

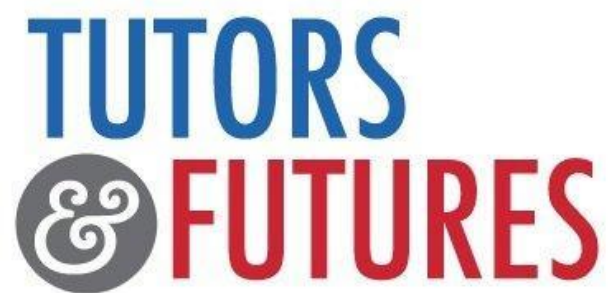
The total mark for this paper is 50

NAME

TOTAL MARKS

PERCENTAGE

Calculators may not be used.



1. Ann and Bob shared £240 in the ratio 3:5.

Ann gave half of her share to Colin.

Bob gave a tenth of his share to Colin.

What fraction of the £240 did Colin receive?

.....
(Total 5 marks)

2. Factorise $8x^2 - 20$

.....
(Total 1 mark)

3. Factorise fully $8y^2 - 24xy$

.....
(Total 2 marks)

4. Solve $4y + 3 = 2y + 8$

$y = \dots\dots\dots$
(Total 3 marks)

5. Make y the subject of the formula

$$x = 3y + 2$$

$\dots\dots\dots$
(Total 2 marks)

6. (a) Express 56 as the product of its prime factors.

$\dots\dots\dots$
(Total 2 marks)

- (b) Find the Lowest Common Multiple of 56 and 98.

$\dots\dots\dots$
(Total 2 marks)

7. (a) Expand $3(2y - 5)$

.....
(Total 1 mark)

(b) Expand and simplify $3(x - 4) - 2(x + 5)$

.....
(Total 2 marks)

8. Work out $\frac{2}{5} + \frac{1}{7}$

.....
(Total 2 marks)

9. Work out $\frac{3}{4} \times \frac{1}{5}$

.....
(Total 2 marks)

10. Work out $12\frac{1}{2} \div \frac{5}{8}$

.....
(Total 3 marks)

11. Work out 45% of £8000

.....
(Total 2 marks)

12. Andrew bought a saddle for his horse in a 20% off sale.
The sale price of the saddle was £220.

Calculate the normal price of the saddle.

.....
(Total 3 marks)

13. $y = 5x - 3$

Find the value of y when $x = 9$

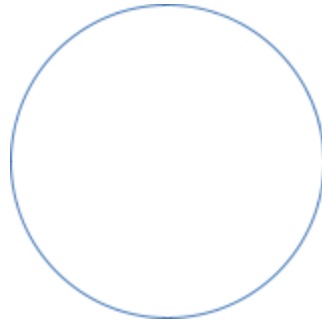
.....
(Total 2 marks)

14. Solve the inequality $5x - 7 < 28$

.....
(Total 2 marks)

15.

Diagram NOT accurately drawn.



A circle has a radius of 6cm.

(a) Work out the area of the circle.

Give your answer in terms of π .

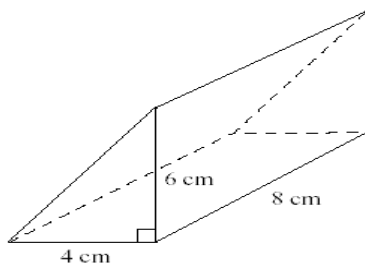
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(Total 2 marks)

(b) Work out the circumference of the circle.

Give your answer in terms of π .

.....
(Total 2 marks)

16. Work out the volume of the triangular prism.



.....
(Total 4 marks)

17. 80 children went on a school trip.
They went to London or York.

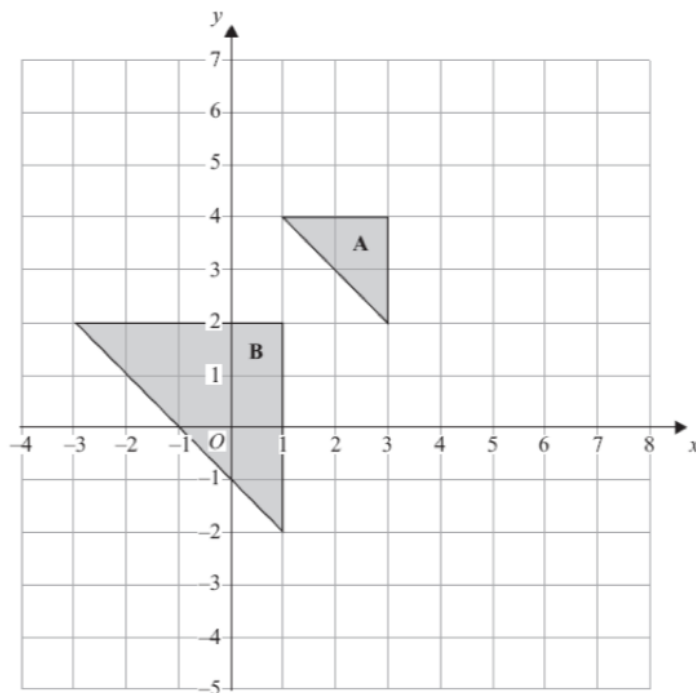
23 boys and 19 girls went to London.
14 boys went to York.

Use this information to complete the two-way table.

	London	York	Total
Boys			
Girls			
Total			

(Total 3 marks)

18. Describe fully the single transformation that maps triangle A onto triangle B.



.....

.....

.....

(Total 3 marks)