
141- (4MA0-S 2012-Paper 2F-Q23)-NUMBER

Express 300 as a product of its prime factors.

.....
(Total for Question is 3 marks)

142- (4MA0-S 2012-Paper 2F-Q18)-NUMBER

Work out the value of $\frac{6.6 \times 1.2}{4.4 - 2.75}$

.....
(Total for Question is 2 marks)

143- (4MA0-S 2012-Paper 2F-Q11)-NUMBER

- (a) (i) Work out 2.91^2
Write down all the figures on your calculator display.

.....

- (ii) Write your answer to part (a)(i) correct to 2 decimal places.

.....

(2)

- (b) (i) Find the cube root of 30
Write down all the figures on your calculator display.

.....

- (ii) Write your answer to part (b)(i) correct to 2 significant figures.

.....

(2)

(Total for Question is 4 marks)

144- (4MA0-S 2012-Paper 2F-Q9)-NUMBER

- A cinema ticket costs \$7.50
A bag of popcorn costs \$1.35
A can of lemonade costs \$1.20

Nisha buys three cinema tickets, two bags of popcorn and one can of lemonade.

Work out how much change she should receive from \$30

\$

(Total for Question is 3 marks)

145- (4MA0-S 2012-Paper 2F-Q8)-NUMBER

(a) Here is a list of four numbers.

1 3 4 7

Choosing numbers from the list, write a different number in each box to make the calculation correct.

$$\boxed{} \boxed{} \times 2 = \boxed{} \boxed{}$$

(1)

(b) Explain why the calculation can never be correct if the list is

1 3 5 7

.....
.....

(1)

(Total for Question is 2 marks)

146- (4MA0-S 2012-Paper 2F-Q7)-NUMBER

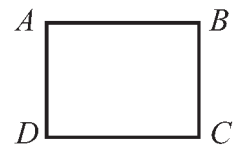
Write down all the factors of 20

.....

(Total for Question is 2 marks)

Complete the following sentences by writing a sensible metric unit in the space provided.

(i) The area of rectangle $ABCD$ is 3



(ii) The weight of a newborn baby is 3.4

(iii) The height of the London Eye is 135



(Total for Question is 3 marks)

2	6	9	16	17	18	20
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From the numbers in the box, write down

(a) both the odd numbers,

.....
(2)

(b) both the square numbers,

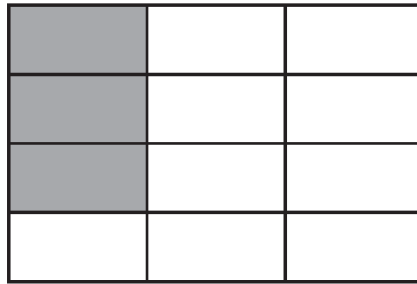
.....
(2)

(c) both the prime numbers.

.....
(2)

(Total for Question is 6 marks)

(a)



- (i) What fraction of this shape is shaded?
Give your fraction in its simplest form.

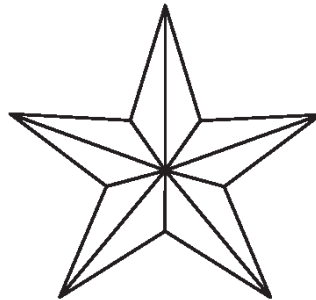
.....

- (ii) Write your answer to part (i) as a decimal.

.....

(3)

(b)



- (i) Shade 20% of this shape.
(ii) What percentage of the shape is unshaded?

..... %

(2)

(Total for Question is 5 marks)

(a) Solve $3y = 24$

$$y = \dots\dots\dots$$

(1)

(b) Simplify

(i) $r \times 6 \times t$

.....

(ii) $3m + 7m - 2m$

.....

(iii) $a^3 + a^3$

.....

(3)

(c) $W = 4x + 5y$

Work out the value of W when $x = -2$ and $y = 3$

$$W = \dots\dots\dots$$

(2)

(Total for Question is 6 marks)

Expand and simplify

(i) $5(2x + 1) - 3(3x - 1)$

(ii) $(y + 5)(y - 7)$

.....
.....
(Total for Question is 4 marks)

(a) Show that $\frac{4}{5} \div \frac{7}{15} = 1\frac{5}{7}$

(2)

(b) Show that $5\frac{1}{4} - 1\frac{2}{3} = 3\frac{7}{12}$

(3)

(Total for Question is 5 marks)

Showing clear algebraic working, solve the simultaneous equations

$$3a + 2b = 1$$

$$a + 2b = 5$$

$$a = \dots\dots\dots$$

$$b = \dots\dots\dots$$

(Total for Question : is 3 marks)

$$T = 3d + 4n$$

(a) Work out the value of T when $d = 2$ and $n = 5$

$$T = \dots\dots\dots$$

(2)

(b) Work out the value of T when $d = -4$ and $n = 3.5$

$$T = \dots\dots\dots$$

(2)

(c) Work out the value of d when $T = 9$ and $n = 6$

$$d = \dots\dots\dots$$

(3)

(Total for Question . is 7 marks)

Solve $7x - 5 = 3x + 2$
Show your working clearly.

$$x = \dots\dots\dots$$

(Total for Question is 3 marks)

(a) Simplify $c^4 \times c^3$

.....
(1)

(b) $\frac{y^3 \times y^n}{y} = y^6$

Find the value of n .

$n =$
(2)

(Total for Question . is 3 marks)

(i) Solve the inequalities $-6 < 4x \leq 8$

.....
(ii) n is an integer.

Write down all the values of n which satisfy $-6 < 4n \leq 8$

.....
(Total for Question is 4 marks)

(a) Simplify

(i) $t + t + t$

.....

(ii) $b \times 5 \times a$

.....

(2)

(b) Solve

(i) $8x - 3 = 9$

$x =$

(ii) $7y - 6 = 2y + 8$

Show clear algebraic working.

$y =$

(5)

(c) Expand and simplify

$(x - 6)(x + 9)$

.....

(2)

(Total for Question is 9 marks)

159- (4MA0-S 2013-Paper 2F-Q23)-ALGEBRA

(a) Solve the inequalities $-6 \leq 3x < 9$

.....
(2)

(b) n is an integer.

Write down all the values of n which satisfy $-6 \leq 3n < 9$

.....
(2)

(Total for Question is 4 marks)

160- (4MA0-S 2013-Paper 2FR-Q8)-ALGEBRA

(a) Solve $x - 4 = 3$

$x =$
(1)

(b) Solve $3y + 7 = 1$

$y =$
(2)

(Total for Question is 3 marks)

(a) $P = 6c + 5t$

Work out the value of P when $c = 2$ and $t = 3$

$P = \dots\dots\dots$
(2)

(b) $A = n(y + 2)$

Work out the value of A when $n = 6$ and $y = -5$

$A = \dots\dots\dots$
(2)

(Total for Question 1 is 4 marks)

(i) Solve the inequalities $3 \leq x + 4 < 7$

(ii) n is an integer.

Write down all the values of n which satisfy $3 \leq n + 4 < 7$

(Total for Question is 4 marks)

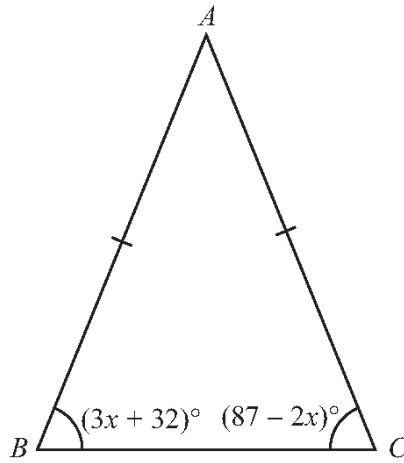


Diagram **NOT**
accurately drawn

In the isosceles triangle ABC ,
 $AB = AC$
angle $B = (3x + 32)^\circ$
angle $C = (87 - 2x)^\circ$

Work out the value of x .
Show clear algebraic working.

$x = \dots\dots\dots$

(Total for Question is 4 marks)

$$A = 5c - d$$

(a) Work out the value of A when $c = 1.6$ and $d = -2$

$$A = \dots\dots\dots$$

(2)

(b) Work out the value of c when $A = 1$ and $d = 2$

$$c = \dots\dots\dots$$

(3)

(Total for Question is 5 marks)

Solve $3x + 16 = 1 - 2x$
Show clear algebraic working.

$$x = \dots\dots\dots$$

(Total for Question is 3 marks)

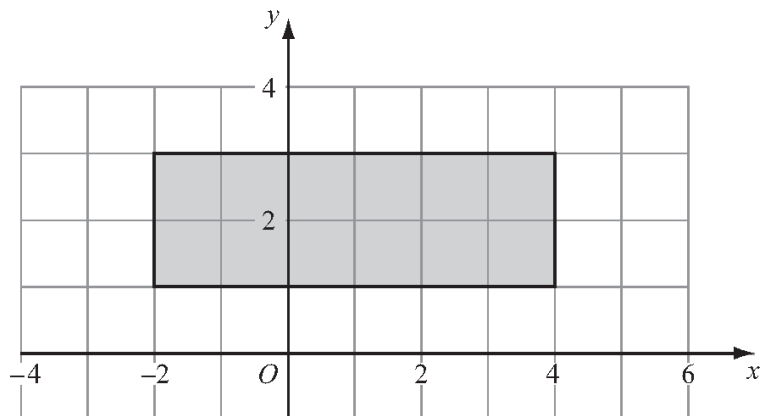
(a) Expand and simplify $3(2x - 5) - 4(x + 3)$

.....
(2)

(b) Expand and simplify $(y + 7)(y + 2)$

.....
(2)

(Total for Question is 4 marks)



Write down inequalities to define fully the shaded region.

.....
(Total for Question is 3 marks)

(a) Simplify

(i) $m + m + m + m + m$

.....

(ii) $p \times h \times 7$

.....

(2)

(b) Solve $8g = 24$

$g =$

(1)

(c) Solve $f + 9 = 23$

$f =$

(1)

(Total for Question is 4 marks)

$$w = 2a + b$$

(a) Work out the value of w when $a = 5$ and $b = 4$

$$w = \dots\dots\dots$$

(2)

(b) Work out the value of a when $w = 28$ and $b = 3$

$$a = \dots\dots\dots$$

(3)

(Total for Question is 5 marks)

- (a) Solve $7x - 6 = 2x + 17$
Show clear algebraic working.

$x = \dots\dots\dots$
(3)

- (b) Expand and simplify fully $(x + 8)(x + 2)$

$\dots\dots\dots$
(2)

(Total for Question is 5 marks)
