## Fir

## Year 7 Trial Exam

## Vale

## School

## Maths

February 2024

| Topic | Score out of 5 <br> In this test |
| :--- | :--- |
| I can multiply and divide by integers |  |
| I can multiply and divide with decimals |  |
| I can find the area of triangles and <br> quadrilaterals |  |
| I can find the mean of a set of integers |  |
| I can find the mean of decimal, directed or <br> algebraic terms |  |

Name:

## Tutor Group:

Maths Teacher:

## Time allowed: 45 minutes <br> Total marks available: $\mathbf{2 5}$ marks

## I can multiply and divide by integers

(Sparx M187, M354, M262)

Work out
$3 \times 7=$
$9 \times 5=$
$8 \times 4=$
$20 \div 2=$
$49 \div 7=$
$54 \div 9=$

Calculate
$79 \times 6$

Calculate
$784 \div 4$

Work out
$382 \times 47$

| 0 | Working below | $\boldsymbol{X}$ |
| :---: | :--- | :--- |
| 1 | Working towards |  |
| 2 | On Track | $\boldsymbol{V}$ |
| 3 | On |  |
| 5 | Working above |  |

# I can multiply and divide with decimals 

(Sparx M803, M491, M803)

Work out
$3.4 \times 6$

Calculate
$0.03 \times 0.002$

Calculate
$64 \div 5$
Give your answer as a decimal

| 0 | Working below | $\boldsymbol{X}$ |
| ---: | :--- | :--- |
| 1 |  |  |
| 2 | Working towards |  |
| 3 | On Track | $\boldsymbol{V}$ |
| 4 | Working above |  |
| 5 |  |  |

Mikel is shopping for fruit to make a smoothie.
The prices for each fruit, in kg, are shown below.


Mikel buys

- $\quad 5 \mathrm{~kg}$ of bananas
- 2 kg of apples
- 1 kg of strawberries
- 2 kg of oranges

How much money does Mikel spend?

| 0 | Working below | $\boldsymbol{X}$ |
| :---: | :--- | :---: |
| 1 |  |  |
| 2 | Working towards |  |
| 3 | On Track | $\boldsymbol{V}$ |
| 4 | Working above |  |
| 5 |  |  |

## I can find the area of triangles and quadrilaterals

 Sparx M900, M390, M291, N635, M610, M269Find the area of this shape

Area $=$ $\qquad$ squares


Calculate the area of each shape. (All units are in centimetres)


Area $=$ $\qquad$


The area of the triangle is $24 \mathrm{~cm}^{2}$
Find the missing length


The shape below is a compound shape. (All units are in centimetres)
Find the area of the shape


Area $=$ $\qquad$

| 0 | Working below | $\boldsymbol{X}$ |
| :---: | :--- | :---: |
| 1 | Working towards |  |
| 2 | On Track | $\boldsymbol{\bigvee}$ |
| 4 | Working above |  |

# I can find the mean of a set of integers 

 (Sparx M940)Find the mean of each set of numbers

8, 6
Mean = $\qquad$
$24,6,8,2$
Mean = $\qquad$

The value of each card has been hidden.
The mean of the cards is 12 .
The three cards have different values.
Fill in the cards.


The graph shows the midday temperature for a week.
Work out the mean temperature.


## Mean Temperature $=$

$\qquad$

| 0 | Working below | $\boldsymbol{X}$ |
| :---: | :--- | :---: |
| 1 | Working towards |  |
| 2 | On Track | $\boldsymbol{V}$ |
| 4 | Working above |  |
| 5 |  |  |

I can find the mean of decimal, directed or algebraic terms (Spar M940, M795)

Find the mean of each set of numbers
2.3, 6.1

Mean = $\qquad$
$6,-7,1,0,-2,14$
Mean = $\qquad$

These cards have a mean of 10 . Find $x$.
$5 x x$
$x=$

Hannah went on a holiday for a week.
The table shows how many hours she spent in the pool each day. What is the mean number of hours that Hannah spends in the pool each day.

| Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 3 | 3.5 | 2.5 | 4 | 0 | 4 |

Mean = $\qquad$

Find the mean of these algebraic expressions.
$5 x+3 \quad 2 x-5 \quad 8 x-1$

Mean = $\qquad$

| 0 | Working below | $\boldsymbol{X}$ |
| :---: | :--- | :--- |
| 1 | Working towards |  |
| 2 | On Track | $\boldsymbol{\bigvee}$ |
| 4 | Working above |  |
| 5 |  |  |

## Test Feedback

Highlight the Sparx Codes for the topics you need to improve on.
Use the Independent Learning on Sparx to complete tasks.

| Topic | Sparx Codes | Tick when complete |
| :---: | :---: | :---: |
| I can multiply and divide by integers | M187 |  |
|  | M354 |  |
|  | M262 |  |
| I can multiply and divide with decimals | M803 |  |
|  | M491 |  |
|  | M803 |  |
| I can find the area of triangles and quadrilaterals | M900 |  |
|  | M390 |  |
|  | M291 |  |
|  | N635 |  |
|  | M610 |  |
|  | M269 |  |
| I can find the mean of a set of integers | M940 |  |
| I can find the mean of decimal, directed or algebraic terms | M795 |  |

