SMARTWIZ

GRADE 5 MATHEMATICS EXAM

MARKS: 50 MARKS	
TIME: 1 hour	
SCHOOL	
CLASS (e.g. 4A)	
SURNAME	
NAME	
MYST PATHWORKS	
Instructions for Students:	
> Read all instructions carefully before beginning the exam.	
> Write your name and student ID clearly on the answer sheet/booklet.	
> Answer all questions unless otherwise stated.	
> Show all your work/calculations where applicable.	
> Write clearly and legibly.	
> Use blue or black ink only. * Do not use correction fluid/tape.	

> Any form of cheating will result in disqualification.

> Raise your hand if you have any questions.

> Do not talk to other students during the exam.

This test consists of 5 pages, excluding the cover page.

> No electronic devices (calculators, phones, etc.) are allowed unless explicitly permitted.

Section A: Multiple Choice Questions (10 marks)

Choose the correct answer for each question. Each question carries 1 mark.

MYST PATHWORKS

What is 345 + 678?

- a) 1023
- b) 1003
- c) 1025
- d) 1033

Which of the following is a prime number?

a) 21

b) 29

c) 35

d) 49

What is the place value of 7 in the number 7,462?

- a) 7,000
- b) 700
- c) 70
- d) 7

How many sides does a hexagon have?

- a) 4
- b) 5

- c) 6
- d) 8

Which fraction is equivalent to ½?

- a) 2/4
- b) 3/4
- c) 4/6
- d) 5/8

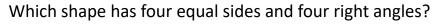
What is 25% of 80?

a) 15

b) 20

c) 25

d) 30



- a) Rectangle
- b) Square
- c) Rhombus
- d) Trapezium

If a clock shows the time as 3:30, what is the angle between the hour and minute hands?

MYST PATHWORKS

- a) 90°
- b) 105°

c) 120°
d) 150°
What is the perimeter of a rectangle with length 8 cm and width 3 cm?
a) 16 cm
b) 22 cm
c) 24 cm
d) 26 cm
Which of these is an odd number?
a) 14
b) 21 MANAGETT ID) A TEHLINAZO ID IIZ C
c) 30 MYST PATHWORKS
d) 40
Section B: Short Answer Questions (20 marks)
Answer the following questions. Each question is worth 4 marks.
Write the number 7,584 in expanded form.
A box contains 24 apples. If you distribute them equally into 6 baskets, how many apples will each basket have?
Find the area of a rectangle with length 9 cm and width 4 cm.

Convert 3 hours and 45 minutes into minutes.
A triangle has sides of 5 cm, 7 cm, and 9 cm. Is it possible for this triangle to be a right triangle? Explain.
Subtract 1,245 from 2,500.
Write the fraction 3/4 as a decimal.
How many degrees are in a straight line? How about in a full circle?
A shop sells 3 packs of pencils, each containing 12 pencils. How many pencils are there in total?
Round 3,768 to the nearest hundred.
Section C: Problem-Solving / Word Problems (20 marks) Answer each question in detail.
(8 marks) A garden is in the shape of a rectangle. Its length is 15 meters, and its width is 10 meters. A path of 1 meter wide is to be built all around the garden. What will be the total area of the garden including the path? (Hint: Find the area of the garden with the path and subtract the garden area.)

ne same distance each hou	ır, how long will it take to travel 300 km?
• • •	150 candies. He wants to pack them into boxes with 10
	nany boxes will he need? Will there be any candies left over? If
o, how many?	
	PATHWORKS

TOTAL: 50

Answer Key (Memo)

Section A: Multiple Choice

- a) 1023
- b) 29
- a) 7,000
- c) 6
- a) 2/4
- b) 20 (25% of $80 = 0.25 \times 80 = 20$)
- b) Square
- b) 105° (At 3:30, the hour hand is halfway between 3 and 4, and the minute hand is at 6 (30 minutes). The angle is 105°)
- b) 22 cm (Perimeter = $2 \times (8 + 3) = 2 \times 11 = 22$)
- b) 21

Section B: Short Answer

$$7,584 = 7,000 + 500 + 80 + 4$$

24 apples ÷ 6 baskets = 4 apples per basket

Area = length \times width = 9 cm \times 4 cm = 36 cm²

3 hours 45 minutes = $(3 \times 60) + 45 = 180 + 45 = 225$ minutes

No, because the sides do not satisfy the Pythagorean theorem $(5^2 + 7^2 \neq 9^2)$.

$$3/4 = 0.75$$

180° in a straight line, 360° in a full circle

 $3 \text{ packs} \times 12 \text{ pencils} = 36 \text{ pencils}$

3,768 rounded to the nearest hundred = 3,800

Section C: Problem-Solving / Word Problems

Garden and Path:

Garden length = 15 m, width = 10 m

Path width = 1 m around the garden

New length = $15 + 2 \times 1 = 17 \text{ m}$

New width = $10 + 2 \times 1 = 12 \text{ m}$

Area of garden including path = $17 \times 12 = 204 \text{ m}^2$

Area of original garden = $15 \times 10 = 150 \text{ m}^2$

Total area including path = 204 m²

Area of the path alone = $204 - 150 = 54 \text{ m}^2$

Train Travel:

Distance in 4 hours = 60 km/hour × 4 hours = 240 km

To travel 300 km at 60 km/hour: Time = $300 \div 60 = 5$ hours

Candies and Boxes:

Total candies = 150

Candies per box = 10

Number of boxes needed = $150 \div 10 = 15$

Leftover candies = 150 mod 10 = 0 (none left over)

End of Exam

Good luck!

TOTAL: 50

