

## Test Instructions

- Check that this question booklet has your correct details printed on it (eSIS number, name, date of birth, school name, class).
If not, write the correct information neatly in the spaces provided.
- You are allowed 80 minutes for this test.
- You must not use a calculator

There are two types of question:
Type 1: Multiple choice (29 questions)

- Each question has four possible answers. Only one is correct.
- Use only a pencil to shade in the answer bubble of your choice.
- If you make a mistake then rub out your answer completely and shade in the bubble of your new answer.


## Type 2: Open response (8 questions)

- Write your answers in the spaces provided within the test booklet.
- Do not write outside the answer spaces

■ الر جاء التأكد من أنّ كتيّب الأسئلة هذا يتضمن المعلو مات الصحيحة المتعلقة بك (رقم تعريف التلميذ eSIS، الاسم، تاريخ

المعلومات الصحيحة بشكل و اضح في الفر اغ المخصص لمص لها لما ■ الزمن المسمو ح به للإختبار 80 دقيقة.
■ ■ لا يسمح باستخاد ام الآلة الحاسبة خلال الا الا ختبار . يتضْمن هذا الا خحتبار نو عين من الأ سئلة: النوع الأول: أسئلة الاختيار من متعدد (29 سؤالا) ■ ■ الرجاء استخالمام قلم الرّصاص فقط لتظليل دو ائر الإجابات التي تختارها. ■ إذا أخطأت في إجابتكك فقم.مسسح الإجابة بالڭامل ثّمّ ظللّ دائرة إجابتك الجلديدة.



Absent

The probability that it will rain tomorrow is 0.01
What is the probability that it will not rain tomorrow?
$\bigcirc \quad 0.01$0.5
$\square$
0.9
$\square$
0.99

What does $7^{5} \div 7^{2}$ simplify to?
$\square 7^{3}$
$\square \quad 7^{2.5}$
$\square \quad 7^{7}$
$\square 7^{10}$

3


In the triangle $A B C, A D=6 \mathrm{~cm}$ and the area of $\triangle A B C$ is $30 \mathrm{~cm}^{2}$
What is the length of $C B$ ?
$\square 5 \mathrm{~cm}$10 cm15 cm20 cm

What is the answer to this calculation?
$9.7-2.4 \times 3$
2.5
21.9

Grade 8 Mathematics

Look at this list of fractions.
Match each one to its decimal equivalent.
One has been done for you.

$\frac{1}{5}$
$0 . \dot{3}$
$\frac{1}{3}$
0.2
$\frac{1}{10}$
0.3

The total surface area of this rectangular prism is exactly $1000 \mathrm{~cm}^{3}$ Its height is 5 cm and its length is 20 cm .


What must its width be?
$\square \quad 10 \mathrm{~cm}$16 cm
$\square 20 \mathrm{~cm}$
$\square 32 \mathrm{~cm}$

What is 376.325 rounded to two significant figures?
$\square 376.33$
$\square 376.3$376380

I use a taxi every day to get to work.
One month I kept count of how many times the taxi was early, on time or late.

| Early | On time | Late |
| :---: | :---: | :---: |
| 3 | 15 | 2 |

What is the probability the taxi comes on time?0.150.750.90.25

What is the value of $3^{2}+2^{3}$ ?121755$5^{5}$

The numbers 1 to 10 are in a bag. One number is taken out at random.
What is the probability of this number being greater than 6 ?
$\bigcirc \frac{5}{9}$
$\square \frac{5}{10}$
$\square \frac{4}{10}$
$\bigcirc \frac{4}{9}$

Grade 8 Mathematics

This diagram shows a large, shaded triangle with a triangular hole in it.


Not drawn accurately

What is the shaded area?

What does $27^{\frac{1}{3}}$ simplify to?1893
$\square \frac{1}{9}$

I drove 450 km in four and a half hours.
What was my average speed?
$\square 10 \mathrm{~km} / \mathrm{h}$$11.5 \mathrm{~km} / \mathrm{h}$100 km/h115 km/h

Look at this right-angled triangle $A B C$.


Draw and label a triangle $P Q R$ where $P Q R$ is similar to $A B C$ and $P R=8 \mathrm{~cm}$

What is the simpler form of the expression: $5(3 a-3 b)-3(a-b)$ ?
$\square 5 a-12 b$
$\square 5 a-18 b$
$\square \quad 12 a-12 b$
$\square \quad 12 a-18 b$

16


The area of this trapezium is $50 \mathrm{~cm}^{2}$ and $a$ is less than $b$.
Write down a possible pair of values for $a$ and $b$.
$b=$
cm

A fair 6-sided dice is rolled.
What is the probability that a multiple of 3 is thrown?

- $\frac{1}{6}$
$\bigcirc \frac{1}{2}$
$\square \frac{1}{3}$
$\square \frac{2}{3}$

Which of the following is not a correct rounding of 8.172?88.178.18.2

What is $12 t^{5} \div 3 t^{2}$ when simplified?$4 t^{3}$$4 t^{7}$$4 t^{2.5}$

- $4 t^{10}$

