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LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

SEKHUKHUNE EAST EDUCATION DISTRICT – DISTRICT ON THE RISE

NATIONAL

SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY

AUTUMN ENRICHMENT PRE TEST

MARCH 2026

MARKS: 30

DURATION: 60 MINUTES

This paper consists of 3 pages

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Question 1

1.1 Noma owns a coffee shop and bakes chocolate cupcakes using the recipe below: Use the recipe and the information below to answer the questions that follow:

RECIPE FOR CHOCOLATE CAKE

NB: The recipe makes 15 cups

Ingredients

2 large eggs
220 g all-purpose flour
140 g butter
350 g granular sugar
250 g fat-sour cream
65,5 g unsweetened cocoa powder
2 ounces dark sweet cherries
Bake at 356 °F until dark brown
Bake for 30 minutes.

1 ounce = 28,35 grams

1kg = 2, 2 lb (pounds)

Cup of Chocolate Cake



[Source: www.bromabakery.com]

1.1.1 Nomsa is unable to measure quantities in ounces; convert the weight of dark sweet cherries into grams. (2)

1.1.2 Cakes are baked at a temperature of 356 o F. Express 356 °F in °C. You may use the formula: °C = (°F – 32°) ÷ 1, 8 (2)

1.1.3 Fat sour cream is packed in a container of 125 g. Determine the number of containers required to make 45 cups. (3)

1.1.4 Given that 1kg = 2,2 lb (pounds), convert the amount of all-purpose flour into pounds. (3)

1.1.5 Nomsa places the cakes in the oven at 14:37. She took it out of the oven after 30 minutes. Write down, in words, the time she took the cakes out of the oven. (2)

1.2 For your birthday, a friend gives you a rare, lucky coin that has a square cut out of the middle as shown in the photo and diagram below



1.2.1 You measure the diameter of the circle to be 3 cm, and the length of one side of the square to be 0,9 cm. Calculate the area of the coin in cm2. Round your answer to one decimal place. (7)

1.2.2 If the coin is worth R 3,58 per cm2, calculate its value. (3)

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1.3 Rainwater falling on the roof of a house can be harvested into a tank as shown below. The tank in the picture has a diameter of 760 mm and a height of 1,84 m.



1.3.1 Define the term volume (2)

1.3.2 Calculate the volume of the tank to the nearest litre. You may use; V = area of base x height of cylinder (4)

1.3.3 The capacity of the tank is advertised as 750 litres. Explain why this answer is different from the one calculated in 1.1. (2)

TOTAL: 30

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