

MIXED EXAM QUESTIONS

Check List

Make sure you

- know the format of the exam papers
- manage your time when answering questions
- always use your calculator
- read the questions carefully and check that you have answered the question

Exam Questions

Question 1

The following results were recorded from a Maths Lit test. The test was out of 30.

29 28 27 28 17 14 23 19 23 A

The teacher calculated the mean average to be 22. When handing the tests back to the students, the teacher realised he had lost one. However, knowing the average was 22, the teacher was able to calculate the other mark (The value of A). What is this mark? (Give your answer as a percentage.)

Question 2

The mean average for a class test was 36% for the 15 students who wrote the test. There was a 16th student who was absent and he only wrote the test the following day. The teacher wants the class average to be 50%.

- 2.1 What must the 16th student get for his test in order for the class average to move from 36% to 50%. (Give your answer to the appropriate percentage)
- 2.2 Is it possible for this student to get this mark? Explain.

Question 3

An article of clothing was charged at R269,90 including the 14% VAT. However the teller had forgotten to take off the advertised 25% off the actual cost (not including the 14% VAT). How much should the customer have been charged (including VAT) for the clothing?

Question 4

On exchanging money, an exchange bureau charges commission as follows:

6,5% on every exchange with a minimum charge of R45
Excludes 14% VAT on this commission

- 4.1 How many \$ US will a person get if he exchanges R2000,00 and the exchange rate is:
 $1\$ \text{ US} = \text{R}6,95$
- 4.2 How many Rand were exchanged for \$ US if the commission fee (including the VAT) amounted to R270,47



Question 5

A company gets hired to complete a paint job. The time the job takes depends on the number of painters.

5.1 Copy and complete

No. of Painters	1	3	?	6	10
No. of Hours	?	100	60	?	30

5.2 Draw a rough sketch of a graph which illustrates the above. You don't have to be accurate.

5.3 Workers are expected to work 8 hours a day and they are paid as follows:

- R100 per day (or part thereof) plus R20 per hour
- A further bonus of R200 per person is paid after the job is complete.

Determine whether it is cheaper for the company to employ 3 people or 10 people to do the job.

Question 6

Devin has just turned 18 and he has his eye on a classic second hand vehicle which he will use in order to get to University and back every day.

The vehicle (with an engine size of 2 995CC) is valued at R53 000. Due to the fact that Devin does not have that amount of cash, his parents agree to pay for the vehicle by taking out a loan. The agreement is as follows:

- 25% deposit;
- A 1 year loan agreement;
- R3 842,50 per month;
- R231,85 administration fee every month;
- A once off licensing, registration and delivery fee of R3 200.

Determine the full amount the parents would have paid for the vehicle after the 12 month period.