

QUESTION ONE: Multiple Choice

Write only the number and the correct letter.

1.1) The value of the underlined digit in 53 105 is:

- a) 1
- b) 10
- c) 100
- d) 1000

1.2) 46 522 rounded off to the nearest 1000 is:

- a) 46 500
- b) 46 600
- c) 46 000
- d) 47 000

1.3) $5 + 3 \times 2 = \square$

- a) 16
- b) 13
- c) 11
- d) 10

1.4) 13 thousands + 4 hundreds + 15 tens written as a number:

- a) 17 150
- b) 13 415
- c) 13 550
- d) 17 015

1.5) The product of two factors is 63. One of the factors is 3. What is the other factor?

- a) 7
- b) 54
- c) 63
- d) 21

1.6) How many $\frac{1}{4}$ are there in $3\frac{1}{2}$?

- a) 12
- b) 5
- c) $\frac{14}{4}$
- d) 14

1.7) Which of the following expressions represents 45%?

- a) 45.0
- b) 0.045
- c) $\frac{9}{20}$
- d) $\frac{1}{45}$

1.8) $10^3 - 10^2 = \square$

- a) 600
- b) 10
- c) 900
- d) 1 100

1.9) 5 minutes to 10 in the evening written in 24-hour time:

- a) 10:05
- b) 09:55 pm
- c) 21:55
- d) 22:05

1.10) Which of these numbers is a composite number?

- a) 17
- b) 5
- c) 37
- d) 39

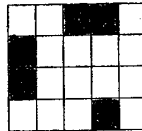
QUESTION TWO: Number Concepts

- 2.1) Write the following as a number:
 $(4 \times 100\,000) + (6 \times 10\,000) + (5 \times 100) + (3 \times 10) + (9 \times 1)$ (1)
- 2.2) The product of two consecutive prime numbers is 143.
 What are the two prime numbers? (1)
- 2.3) Fill in the brackets so that the following statement is true:
 $22 \times 18 \times 9 + 1 = 202$ (1)
- 2.4) Fill in the appropriate relationship sign ($<$, $>$, $=$):
 $(305 - 75) \times 1$ * $305 - (75 \times 1)$ (1)

[4]

QUESTION THREE: Fractions, Percentages and Ratio

- 3.1) Write the following mixed number as an improper fraction: $6\frac{1}{2}$ (1)
- 3.2) What is $\frac{3}{5}$ of 60m? (1)
- 3.3) What is 20% of R150? (1)
- 3.4) Refer to the diagram below and answer the questions which follow:



- a) What percentage of the grid is grey blocks? (1)
- b) What fraction of the grid is white blocks? (1)
- c) What is the ratio of grey blocks to white blocks? (1)

- 3.5) The ratio of hockey players to rugby players in Grade Six is 6 to 4.
 If there are 24 hockey players, how many hockey and rugby players are there altogether in Grade Six? (2)
- 3.6) The ratio of dog-lovers to cat-lovers in Room 15 is 5:3. If there are 32 learners altogether, how many learners are cat-lovers? (2)

[10]

QUESTION FOUR: Time

- 4.1) Complete the table below. Write only the letter and the correct answer.

	12-hour time	24-hour time
 This time is between midday and midnight		a)
 This time is between midday and midday		b)
This time is between midday and midday 20 minutes to 9 in the morning	c)	
Half-past one in the afternoon	d)	

$(4 \times \frac{1}{2} = 2)$

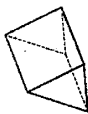
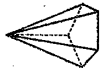
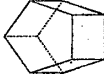
- 4.2) Complete:

- a) 438 years = _____ centuries _____ years (1)
- b) 400 min = _____ hours _____ minutes (1)
- c) 370 d = _____ years _____ days (1)
- d) 4 yrs 21 wks = _____ wks (1)

[6]

QUESTION FIVE: Shapes, Objects and Angles

5.1) Complete the table below. Only write the letter and the answer.

SHAPE	SHAPE NAME	NUMBER OF FACES	SHAPE OF FACES	NUMBER OF VERTICES	NUMBER OF EDGES
	Triangular Prism	A	Rectangles+ Triangles	6	9
	B	6	C	6	10
	Tetrahedron	4	Triangles	D	6
	E	7	Pentagons + rectangle / square	10	15
	Square based pyramid	5	Square and triangles	5	F

$(6 \times \frac{1}{2} = 3)$

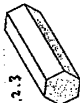
5.2) Match the boxes with their nets. Write the number with the correct letter.



5.2.1



5.2.2



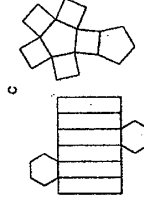
5.2.3



5.2.4



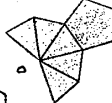
A



B



C



D

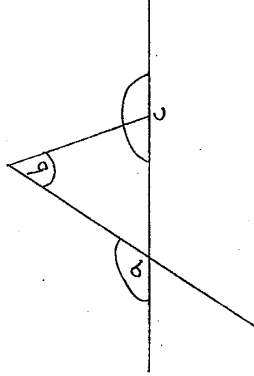
$(4 \times \frac{1}{2} = 2)$

5.3) How many lines of symmetry does the diagram below have?



(1)

5.4) Look at the angles below and say what kind each one is.



(3)

[9]

QUESTION SIX: Data Handling

6) These are the test marks for a Grade 6 class:

21; 24; 19; 15; 26; 19; 20; 21; 20; 21; 21; 30; 24

- How many pupils wrote the test? (1)
- What is the mode? (1)
- What is the median? (1)
- What is the difference between the mode and the lowest mark? (1)

[4]

QUESTION SEVEN: Calculations

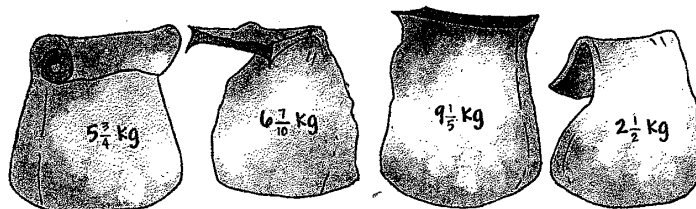
7) You can use any method to solve the following calculations.
Show all your working out.

- a) $(4\,482 + 5\,351) - 3\,291 = \square$ (3)
 - b) $7\frac{5}{6} + 6\frac{2}{3} = \square$ (2)
 - c) $5\,893 \times 521 = \square$ (2)
 - d) $8\,463 \div 22 = \square$ (2)
- [9]

QUESTION EIGHT: Problem Solving

8.1) Kyle's dad has several bags of cement. He needs 25kg to finish building the garden wall. He records how much cement is left in each bag by writing the mass on the outside. Will he have enough to complete the wall? If not, how much more will he need to buy?

(5)



8.2) Hannah would like to buy an oil painting at a craft market but she does not have enough money. If she pays a deposit of R1 255 and twelve instalments of R85, how much will she have paid for the painting in total?

(3)

[8]