

N4 NUMERACY 1.3

This resource is to support pupils in passing the appropriate National 4 Assessment Standard. The questions and marking schemes used are from SQA past papers and as such test the topics in their entirety from grade A to C and *may* include other areas from the course. In addition the questions from **Paper 1** (P1) should be completed **without** the use of a calculator and questions from **Paper 2** (P2) permit the use of a calculator.

Each Assessment Standard is used to ensure pupils have the minimum competency on the specified sub-skills for the National 4 course. As such each Assessment Standard will test grade C work on that specific topic.

This resource is divided into two sections:

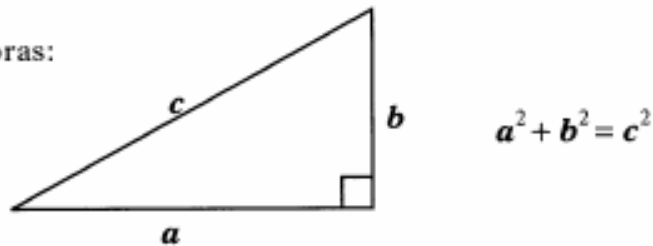
- Section A has an example on each sub skill for the relevant Assessment Standard and the marking scheme for these questions
- Section B has extra practice questions on this Assessment Standard and the marking scheme for these questions

<u>Unit Assessment Standard</u>	<u>Sub skills</u>	Section A – Question Number
Numeracy 1.3 Recording measurements using a straightforward scale on an instrument	Recorded a measurement accurately on at least one occasion using a scale on a measuring instrument. The recording must be taken to the nearest marked unnumbered division.	Q1 (length) Q2 (angle)

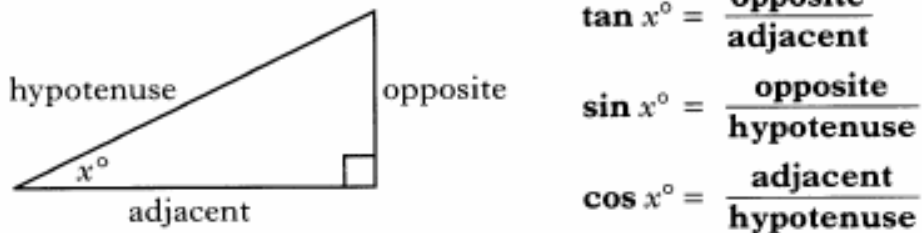
FORMULAE LIST

- Circumference of a circle: $C = \pi d$
 Area of a circle: $A = \pi r^2$
 Curved surface area of a cylinder: $A = 2\pi r h$
 Volume of a cylinder: $V = \pi r^2 h$
 Volume of a triangular prism: $V = Ah$

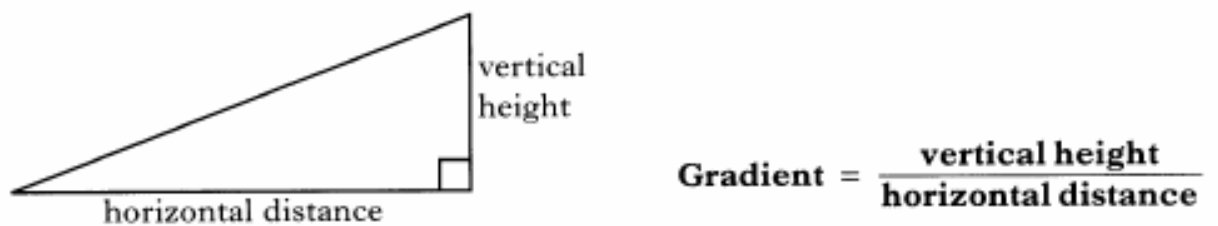
Theorem of Pythagoras:



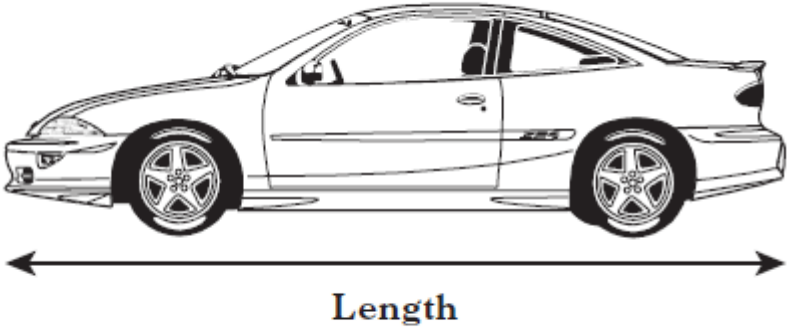
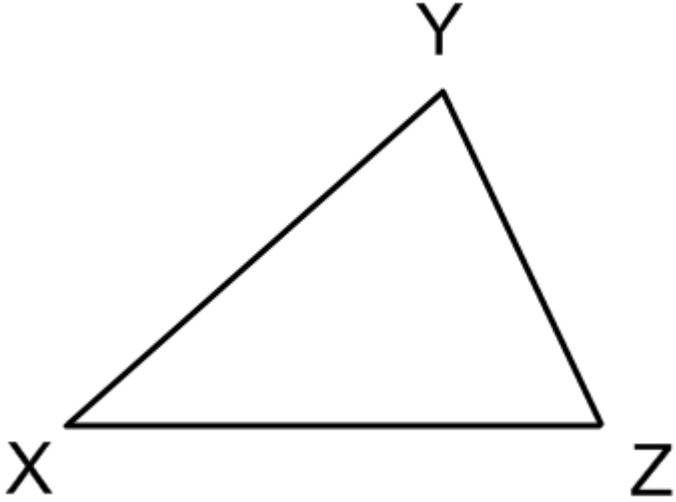
Trigonometric ratios
in a right angled
triangle:



Gradient:



Section A

Q		Marks
<p>Q1 P2</p>	<p>2. The scale drawing of a car is shown below.</p>  <p>(a) Measure the length of the car in centimetres.</p>	<p>1</p>
<p>Q2</p>	<p>Measure angle YXZ.</p> 	<p>1</p>

Section A

MARKING

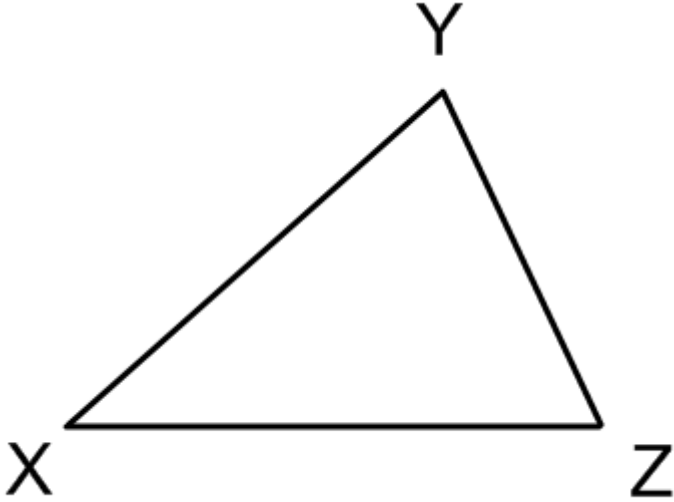
SCHEME

Section A - Marking Scheme

Q		Marks
Q1	A4 copy of question 10.2cm \pm 0.2cm A5 copy of question 5.1cm \pm 0.2cm	1
Q2	42° \pm 2°	1

Section B

Section B – Paper 1 – Questions

Q		Marks
1	<div style="text-align: center;">  </div> <p>a) Measure XZ b) Measure angle XYZ c) Measure YZ d) Measure angle XZY e) Measure XY</p>	<p>1 1 1 1 1</p>

Section B – Paper 2 – Questions

Q	No Paper 2 questions on this topic	Marks

Section B

MARKING

SCHEME

Section B – Paper 1 – Marking Scheme

Q		Marks
1	<p>A4 copy of the question</p> <p>a) 7.1cm \pm 0.2cm</p> <p>b) 74° \pm 2°</p> <p>c) 4.9cm \pm 0.2cm</p> <p>d) 65° \pm 2°</p> <p>e) 6.7cm \pm 0.2cm</p> <p>A5 copy of the question</p> <p>a) 3.6cm \pm 0.2cm</p> <p>b) 74° \pm 2°</p> <p>c) 2.5cm \pm 0.2cm</p> <p>d) 65° \pm 2°</p> <p>e) 3.3cm \pm 0.2cm</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>

Section B – Paper 2 – No Questions