1.1   Well answered.

1.2.1 Well answered. Common mistake was the swopping of x and y co-ordinates.

1.2.2 Well answered. Many candidates gave answer as an obtuse angle.

1.2.3 Poorly answered. Did not understand the concept "co-linear".

1.2.4 Often misinterpreted. Many candidates calculate the midpoint, instead of the endpoint.

1.3.1 Most of the candidates could cope with this question. Those who struggled did not understand the concept of "locus".

Well answered. Many candidates did not make a conclusion. Many candidates used a diagram and were penalised.

QUESTION 2

2.1   Candidates scored because of substitution mark but lost marks because they did not use the general equation of the circle.

Most scored but many used the co-ordinates of *A* instead of the radius.
Poorly answered. Lack of understanding of a tangent, many found the equation of PT.
Many candidates did not know the rule of gradients of parallel lines and therefor did not connect to their answer to 2.2. Some created their own co-ordinates.
Most did not use the fact that the line goes through the origin. (c = 0).
Candidates used the equation of the straight line and substituted a value of *m* for gradient.

QUESTION 3

Substitution mostly done correctly but still problems with calculator use, especially with *cosec 121°*.
Answered well but some candidates squared the angle and not the function.

Did not identify *12* with the opposite or the *13* with the hypotenuse.
Did not identify the correct quadrant or the sign of the axes in each quadrant.
Substitution in Pathagoras, even when done incorrectly, was manipulated to give the answer of *5.*
A few did not recognise the Pythagorian triple.
A lot of candidates gained *4 out 5* marks only missing the mark for the sign.
Most learners could use the trigonometric ratios on their diagram correctly.

Signs often given incorrectly for *sin x* and *tan 135°.*
Tan x was used instead of *tan 45° / 135°.*
Some did not use the c0-function of *cosec* correctly.

QUESTION 4

Well answered, except that the co-ordinates for *d* and *e* were swapped.

Not answered well in general.

4.2.2/4.2.3

The candidates who got to the end (final) answer had the signs wrong and the notation used was weak.

QUESTION 5

Most candidates did not know the identities.

Candidates had problems because they did not realise that they should look for a reference angle.
   (acute angle).
   Many ignored the interval and therefor did not choose the correct quadrant.
   A lot of candidates divided by two (2) as their first operation. Some surprisingly divided by sin 2.

QUESTION 6

This question in general was answered poorly and candidates are still battling with this section of the work

Educators should not teach the cos-proof using the co-ordinates qCosP and qSinP.
Candidates are very confused and muddle up the proof.

For question 6.2 a sketch should have been provided.
Candidates were asked to draw own sketch and lost many marks because of this.
Asking for the size of cos F was a huge problem as candidates first tried to make cos F the subject
of the formula. Candidates made mistakes in doing this and lost all their marks if formula was wrong.

Candidates had to use the angle found in the previous question to work out area and they were penalised twice if mistakes were made.

Poorly answered and candidates could'nt make connections.

QUESTION 7

In general this question was answered poorly or omitted. Naming of angles not clear.

   The proof was answered poorly. Many of them started with $\angle M_1 = \angle M_2 = 90^o$ or OM $\perp$AB.
   That which they had to prove, was used in the proof.
   With the second alternative of S,A,S the wrong sides were used and wrong combinations.

   The reasons were mostly left out. Pythagoras was interpreted incorrectly and candidates used PA^2 which was not in the triangle.

Found $\angle P$ and $\angle S$, instead of $\angle T$.
Got this from $\angle P$ or $\angle T$.
Poorly answered. Candidates started with parallel lines and used this in their proof.
Candidates could'nt apply the converse of this theorem. (Semi-circle)

QUESTION 8

This question was generally very poorly attempted.

This theorem (Proportionality) was not answered so well as to be expected.
Candidates chose the incorrect triangles and lost up till 6 marks if this was the case.
Educators need to made aware that constructing and using heights h and k are not necessary to do this proof.

Candidates still battle with the concept of proportionality and question 8.2.1 and 8.2.2 were very poorly answered or hardly attempted.

QUESTION 9

Poorly answered. Many candidates could identify one angle, but nothing further.

Poorly answered. Concept was understood, but could not identify the angles due to struggling with 9.1.

Although seperate from 9.2, very poorly answered. Very few realised that 9.3 did not require 9.2.

Very poorly answered. Question very often left out. Could not make the link between 9.2 and 9.3.2.