Name :

Teacher :

Official Homework 15 Trigonometry

Created by Mr Lafferty
St. Ninian's High School

This homework covers topics

Basic Operations ☐   Trig in context ☐

Score

27

Teacher Comments :

Pupil's Comment :

1. Carry out the following instructions.   (NON - CALCULATOR QUESTION)

(a)   886.3   -   530

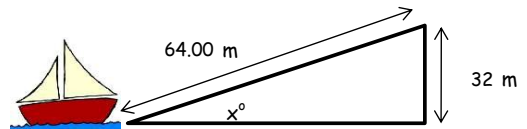(b)   26.2   x   80

(c)   765   ÷   9

(d)
35 % of 140

(5 marks)

Q2. A boat elevator is used to take a boat from lower canal to the upper canal.
    The evelator is in the shape of a triangle.
    The length of the hypotenuse is   64.00 metres
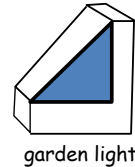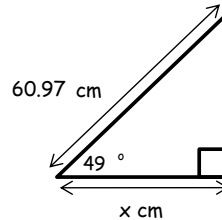   The height of the triangle is   32   metres

    (3 marks KU)

    Calculate the size of the angle x°

    64.00 m

    32 m

    x°

Q3.   The shaded part of Jennifer's garden light is triangular.
      The triangle is right angled.
      The sloping edge is   60.97 centimetres long.
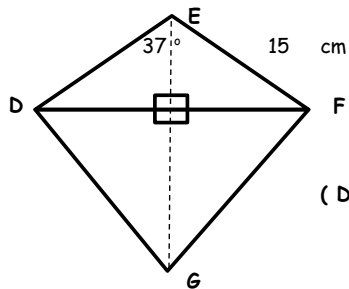   The angle between the base and the sloping edge is   49   °

      Calculate the value of x
                              (3 marks KU)

      60.97 cm

      49 °

      x cm

      garden light

Q4.   DEFG is a kite.   Angle DEG =   37   °   EF =   15   centimetres

E

37 °   15   cm

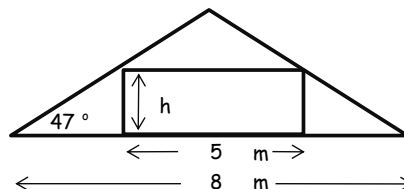D   F   (marks 4 RE)

(Diagram not to scale)   **Calculate the length of DF.**

G

Q5. Gordon the architect is designing a room in an attic of a house.

The room is   5   metres wide.
The width of the roof is   8   metres.
The sloping part of the roof makes an angle of   47   ° with the attic floor.

47 °   h

←   5   m →

←———— 8   m ————→

To satisfy building regulations the height, h, of the room
must be not less than   1.4   metres.

Calculate the height h.   **Does it satisfy the regulations**

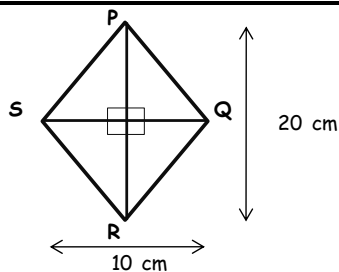(3 marks RE)   (1 marks RE)

P

Q6. PQRS is a rhombus.
     Its largest diagonal PR is   20 cm
     Its smallest diagonal SQ is   10 cm

S   Q   20 cm

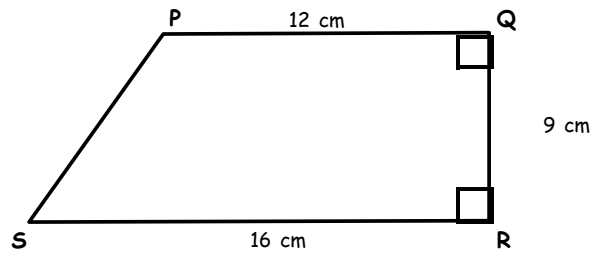**Calculate the size of the angle PQR.**

(4 marks RE)   R

10 cm

Q7. PQRS is a trapezium.

PQ = 12 cm
QR = 9 cm
SR = 16 cm

Angles PQR and QRS are both right angles

Calculate the size of angle PSR.

(4 marks RE)