Lesson 6

Trigonometry : Year 9

6.1 Examination Questions

Question 1

GCSE Examination Question, June 2011, Paper 4H, Q11

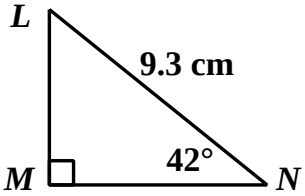
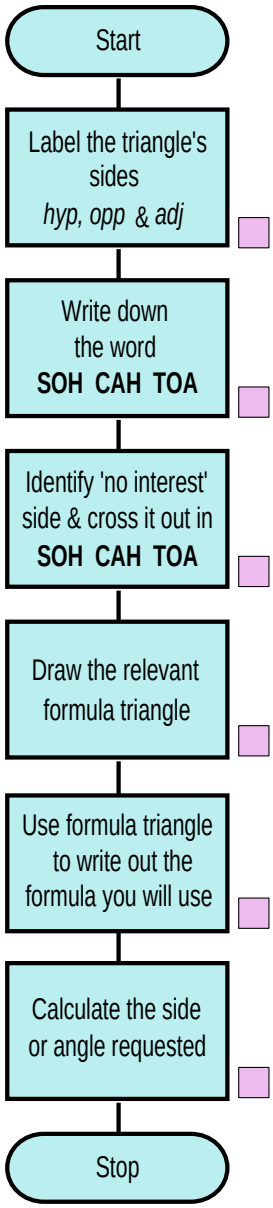


Diagram **NOT** accurately drawn

Calculate the length of *LM*.
Give your answer correct to 3 significant figures.

[3 marks]



Question 2
GCSE, November 2008, paper 4H, Q14 (a)

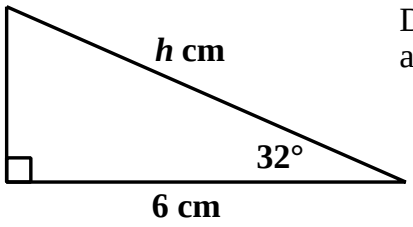


Diagram **NOT** accurately drawn

Calculate the value of *h*.
Give your answer correct to 3 significant figures.

[3 marks]

Question 3
GCSE, November 2007, paper 3H, Q6

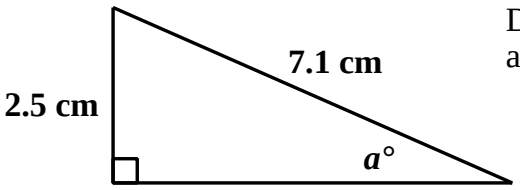


Diagram **NOT** accurately drawn

Calculate the value of *a*.
Give your answer correct to 3 significant figures.

[3 marks]

Question 4
GCSE, November 2010, paper 3H, Q8
(a)

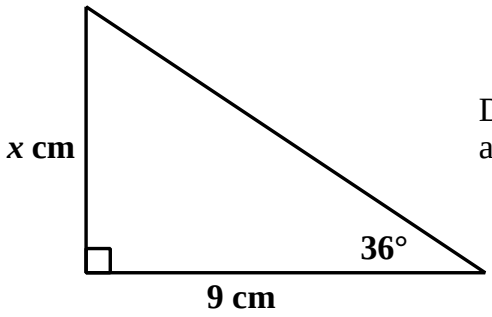


Diagram **NOT** accurately drawn

Calculate the value of *x*.
Give your answer correct to 3 significant figures.

[3 marks]

(b)

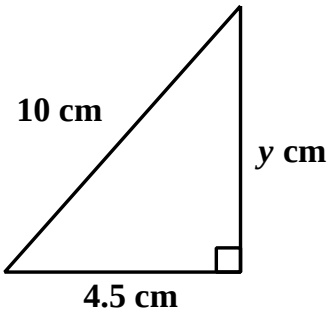


Diagram **NOT** accurately drawn

Calculate the value of *y*.
Give your answer correct to 3 significant figures.

[3 marks]

Question 5

GCSE, May 2006, paper 4H, Q4

(a) The diagram shows triangle *PQR*.

PQ = 4 cm.

PR = 8 cm.

Angle *PQR* = 90°.

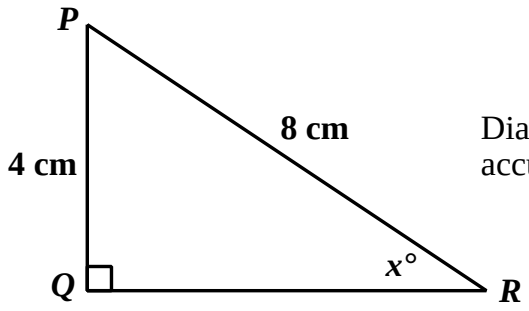


Diagram **NOT** accurately drawn

Calculate the value of *x*.

[3 marks]

(b) The diagram shows triangle *LMN*.

MN = 12 cm.

Angle *LMN* = 32°.

Angle *MLN* = 90°.

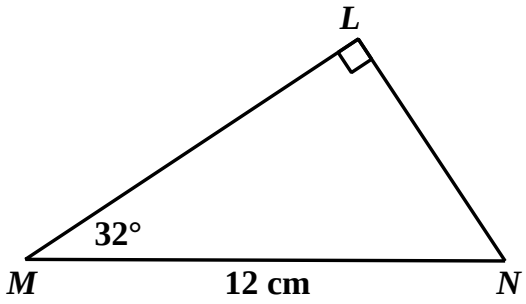


Diagram **NOT** accurately drawn

Calculate the length of *ML*.

Give your answer correct to 3 significant figures.

[3 marks]

Question 6
GCSE, November 2007, paper 4H, Q12

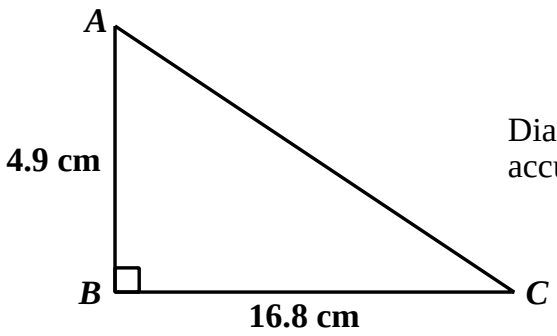


Diagram **NOT** accurately drawn

ABC is a triangle.
Angle *ABC* = 90°.
AB = 4.9 cm.
BC = 16.8 cm.
Calculate the length of *AC*.

[3 marks]

Question 7

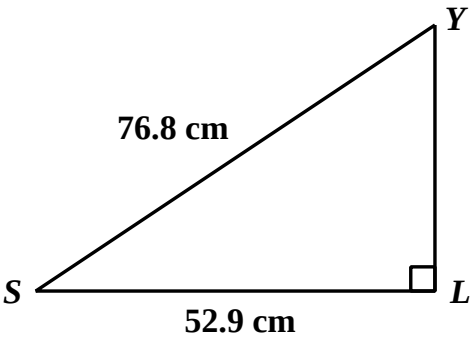


Diagram **NOT** accurately drawn

SLY is a triangle.
Angle *SLY* = 90°.
SL = 52.9 cm.
SY = 76.8 cm.
Calculate the length of *LY*.

[3 marks]

Question 8
GCSE, June 2009, paper 4H, Q8
(a)

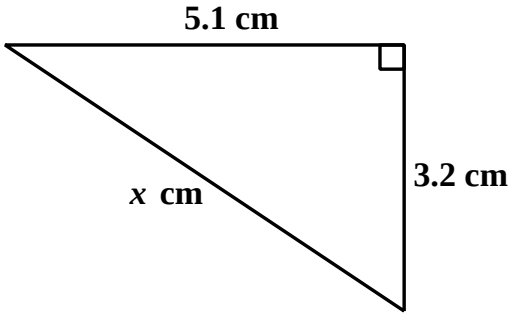


Diagram **NOT** accurately drawn

Calculate the value of *x*.
Give your answer correct to 3 significant figures.

[3 marks]

(b)

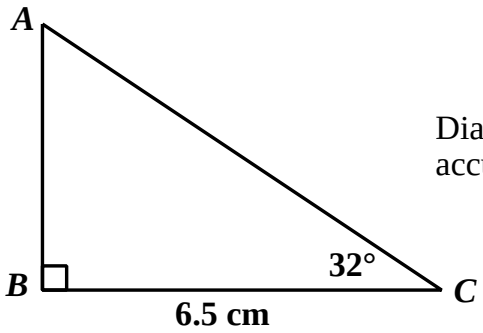


Diagram **NOT** accurately drawn

Calculate the length of *AB*.
Give your answer correct to 3 significant figures.

[3 marks]

Question 9
GCSE, November 2009, paper 3H, Q12

(a)

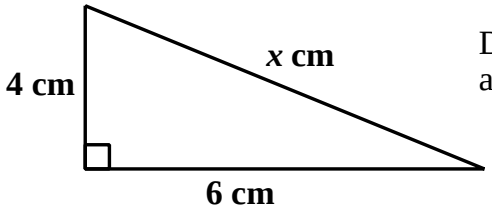


Diagram **NOT** accurately drawn

Calculate the value of x.
Give your answer correct to 3 significant figures.

[3 marks]

(b)

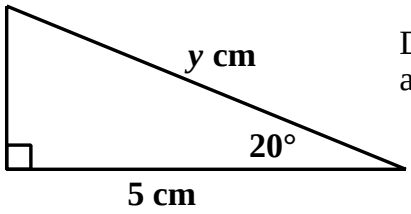


Diagram **NOT** accurately drawn

Calculate the value of y.
Give your answer correct to 3 significant figures.

[3 marks]

Question 10
GCSE, November 2009, paper 3H, Q12

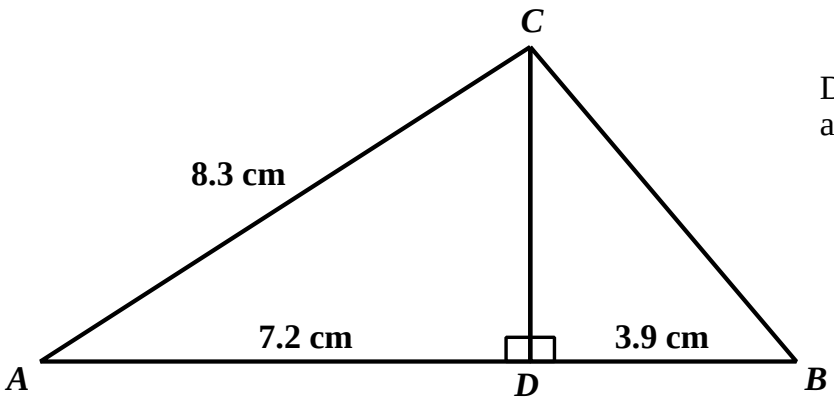


Diagram **NOT** accurately drawn

ABC is a triangle.
D is a point on *AB*.
CD is perpendicular to *AB*.
AD = 7.2 cm, *DB* = 3.9 cm, *AC* = 8.3 cm.

Calculate the size of angle *DBC*.

[5 marks]

Question 11
GCSE, June 2011, paper 3H, Q18

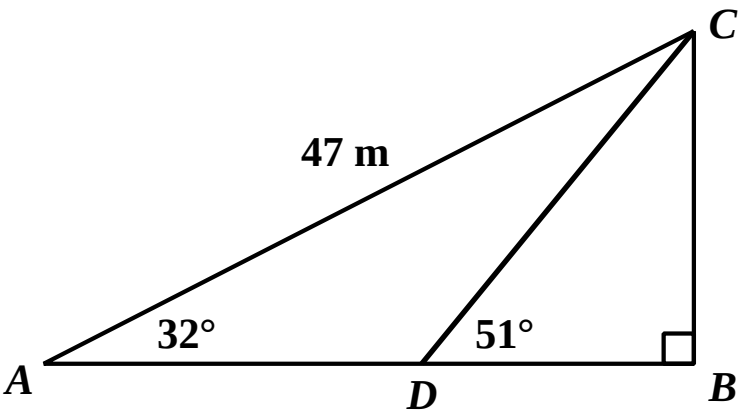


Diagram **NOT** accurately drawn

Triangle *ABC* is right-angled at *B*.
Angle *BAC* = 32°
AC = 47 m.
D is the point on *AB* such that angle *BDC* = 51°

Calculate the length of *BD*.
Give your answer correct to 3 significant figures.

[5 marks]

Question 12

GCSE Examination Question, May 2007, paper 4H, Q7

(a)

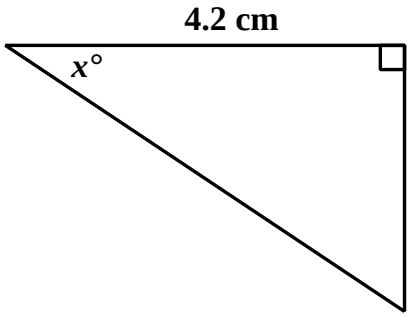


Diagram **NOT** accurately drawn

Calculate the value of *x*.
Give your answer correct to 3 significant figures.

[3 marks]

(b)

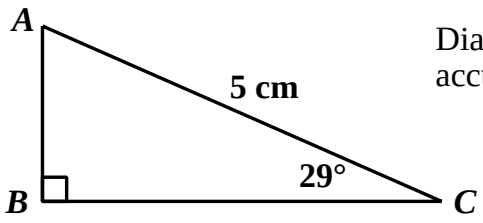


Diagram **NOT** accurately drawn

Calculate the length of *AB*.
Give your answer correct to 3 significant figures.

[3 marks]