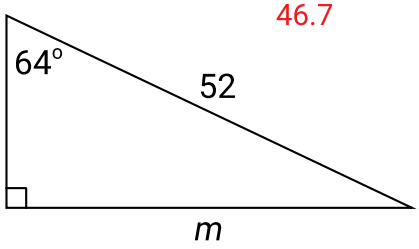
Year 9 Class 17 questions

Q1

Find the value of *m*. [ ] (1 d.p.)

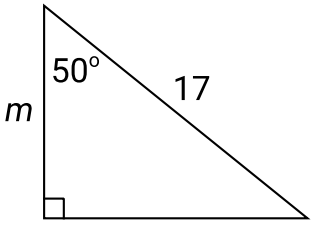
46.7



Q2

Find the value of *m*. [ ] (1 d.p.)

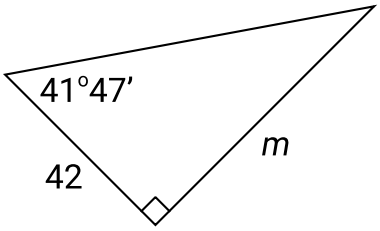
10.9



Q3

Find the value of *m*. [ ] (1 d.p.)

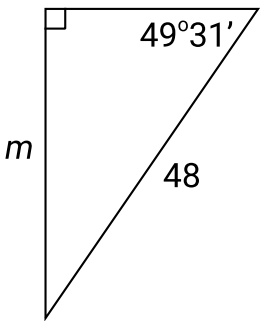
37.5



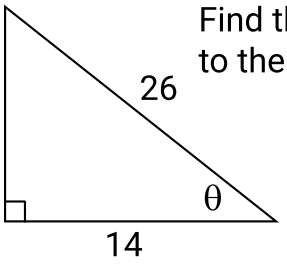
Q4

Find the value of *m*. [ ] (1 d.p.)

36.5



Q5



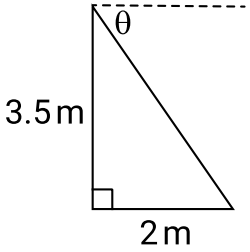
Find the value of θ correct to the nearest minute.

θ = [ ]° [ ]'

57° 25'

Q6

Joy is sitting in a tree, 3.5 m above the ground. She observes Fritz the cat on the ground, 2 m from the base of the tree. Calculate the angle of depression from Joy to Fritz.



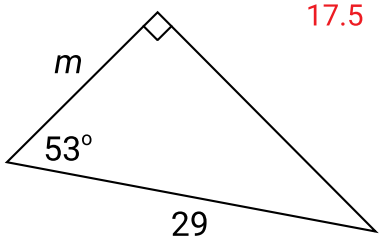
θ = [ ] ° (nearest degree)

60

Q7

Find the value of *m*. [ ] (1 d.p.)

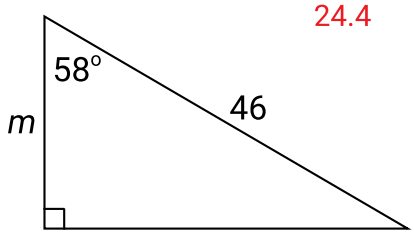
17.5



Q8

Find the value of m. [ ] (1 d.p.)

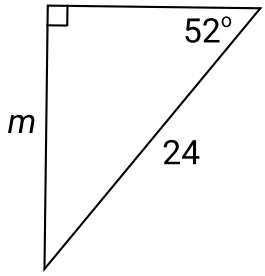
24.4



Q9

Find the value of m. [ ] (1 d.p.)

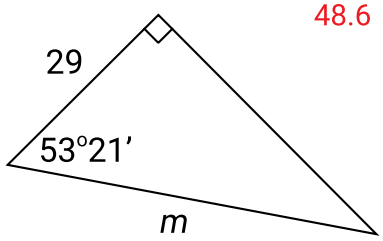
18.9



Q10

Find the value of m. [ ] (1 d.p.)

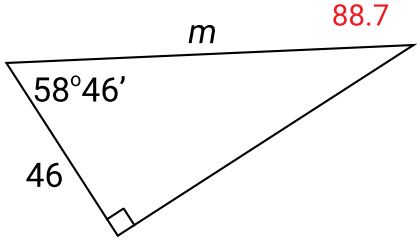
48.6



Q11

Find the value of m. [ ] (1 d.p.)

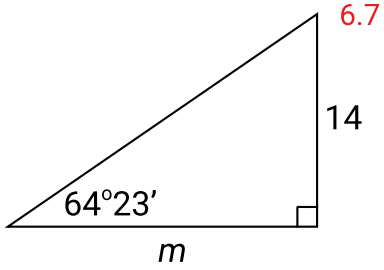
88.7



Q12

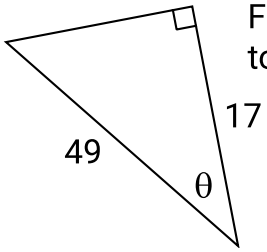
Find the value of m. [ ] (1 d.p.)

6.7



Q13

Find the value of θ correct to the nearest minute.



θ = [ ]° [ ]′

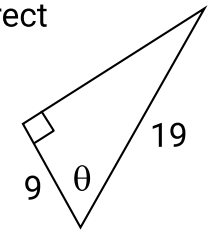
69° 42′

Q14

Find the value of θ correct to the nearest minute.

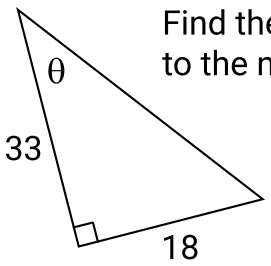
θ = [ ]° [ ]′

61° 44′



Q15

Find the value of θ correct to the nearest minute.



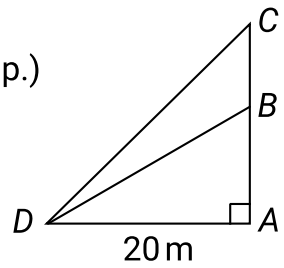
θ = [ ]° [ ]′

28° 37′

Q16

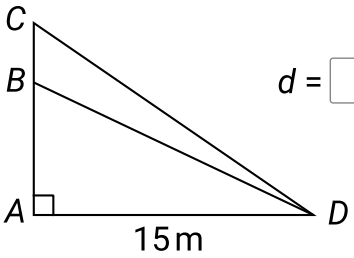
The angle of elevation from D to B is 30°.
The angle of elevation from D to C is 45°.
AD is 20 m. Find the distance from B to C.

$d =$ [8.5] m (1 d.p.)



Q17

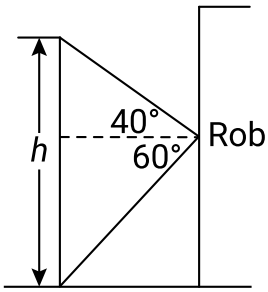
The angle of elevation from *D* to B is 25°.
The angle of elevation from *D* to C is 35°.
AD is 15 m. Find the distance from *B* to *C*.



$d =$ [3.5] m (1 d.p.)

Q18

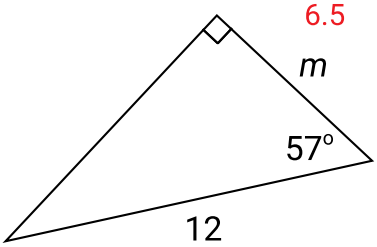
A rock climber Rob observes a cliff opposite him. The base of the cliff is at an angle of depression of 60° and the top of the cliff is at an angle of elevation of 40°. The distance between the base of the two cliffs is 110 m. What is the height of the smaller cliff?



$h =$ [282.8] m (1 d.p.)

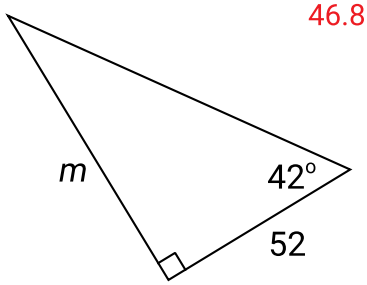
Q19

Find the value of *m*. [6.5] (1 d.p.)



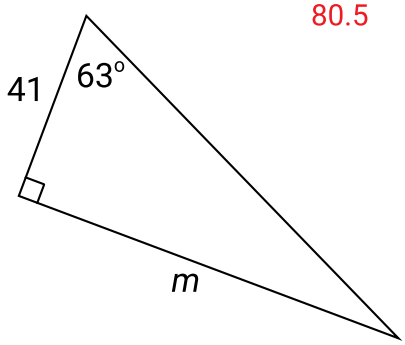
Q20

Find the value of *m*. [46.8] (1 d.p.)



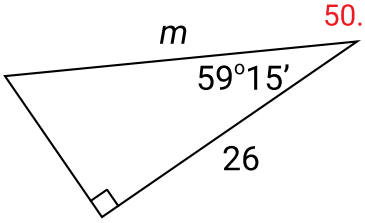
Q21

Find the value of *m*. [80.5] (1 d.p.)



Q22

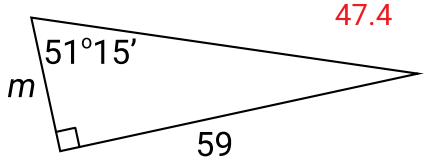
Find the value of *m*. [50.9] (1 d.p.)



Q23

Find the value of m. [ ] (1 d.p.)

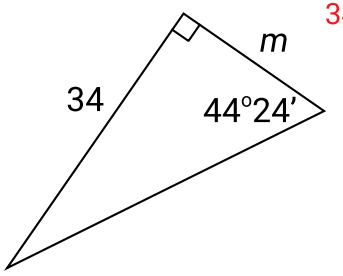
47.4



Q24

Find the value of m. [ ] (1 d.p.)

34.7

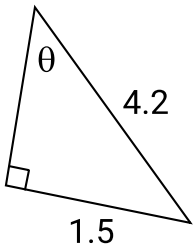


Q25

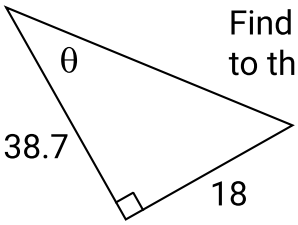
Find the value of θ correct to the nearest minute.

θ = [ ]° [ ]′

20° 55′



Q26



Find the value of θ correct to the nearest minute.

θ = [ ]° [ ]′

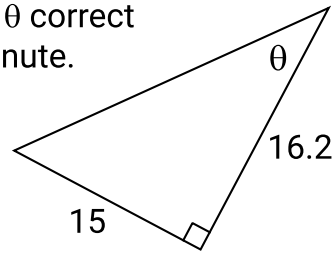
24° 57′

Q27

Find the value of θ correct to the nearest minute.

θ = [ ]° [ ]′

42° 48′



Q28

Janaire is flying a kite on the end of a 60 m string. The vertical height of the kite above the ground is 52 m. Find the angle of elevation of the kite from Janaire.

θ = [ ]° (nearest degree)

60

Q29

A tree has a height of 4.5 m. What is the length of its shadow if the angle of elevation of the sun is 35° 12`?

d = [ ] m (1 d.p.)

6.4

Q30

Bridie can see two birds in a tree. The angle of elevation from Bridie to the first bird is 15° and to the second bird is 23°. If Bridie is 25 m from the base of the tree, what is the distance between the two birds?

d = [ ] m (1 d.p.)

3.9