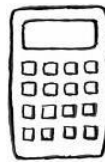


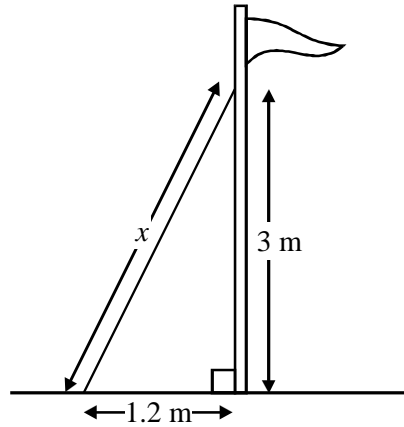
Name:

Teacher
Assessment



Section A **Pythagoras' Theorem** **Grade C**

1. A support for a flagpole is attached at a height of 3 m and is fixed to the ground at a distance of 1.2 m from the base.



Not to scale

Calculate the length of the support (marked x on the diagram).

.....

.....

.....

.....

.....

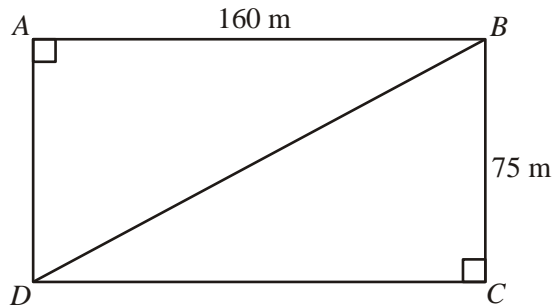
.....

.....

.....

Answer m
(Total 3 marks)

2. A rectangular field $ABCD$ is shown.
The length of the field, $AB = 160$ m.
The width of the field, $BC = 75$ m.



Not to scale

Calculate the length of the diagonal BD .

Give your answer to a suitable degree of accuracy.

.....

.....

.....

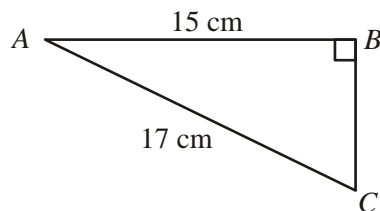
.....

.....

Answerm

(Total 4 marks)

3. ABC is a right-angled triangle.
 $AB = 15$ cm and $AC = 17$ cm



Not drawn accurately

Calculate the length of the side BC .

.....

.....

.....

.....

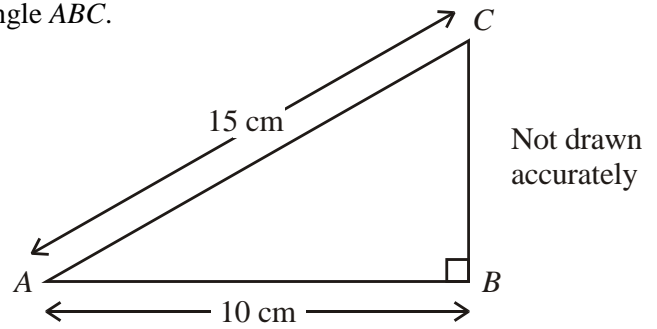
.....

Answercm

(Total 3 marks)

4. (a) The diagram shows a right-angled triangle ABC .

$AB = 10$ cm and $AC = 15$ cm



Calculate the length of BC .
Leave your answer as a square root.

.....

.....

.....

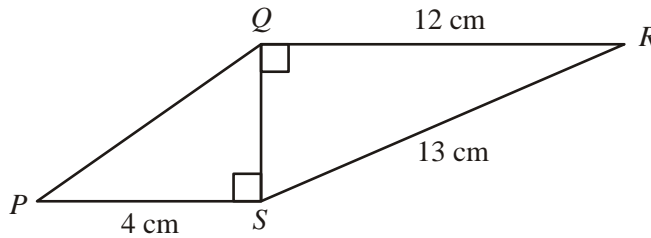
.....

Answer cm

(3)

(Total 3 marks)

5. $PQRS$ is a quadrilateral. Angles RQS and QSP are right angles.
 $PS = 4$ cm, $QR = 12$ cm and $RS = 13$ cm.



Not to scale

Show that the length of PQ is $\sqrt{41}$

.....

.....

.....

.....

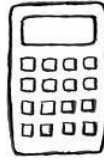
.....

.....

(Total 4 marks)

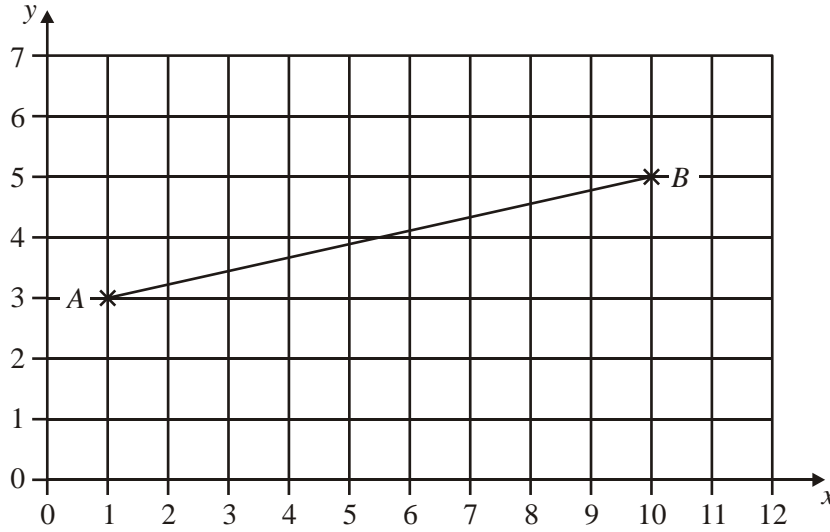
Success:

Target:



Section B Distance Between Two Co-ordinates Grade C

1. The diagram shows the points $A(1, 3)$ and $B(10, 5)$.

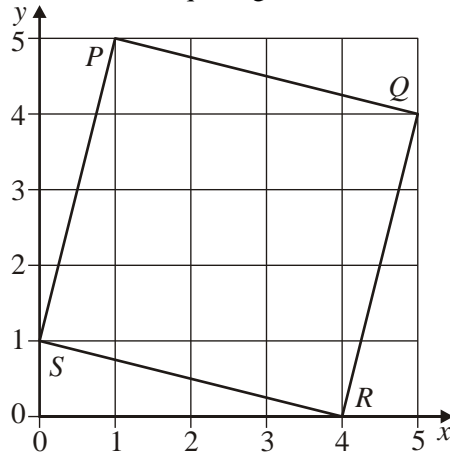


Calculate the distance AB .
Give your Answer to 2 decimal places.

.....
.....
.....
.....
.....
.....

Answer units
(Total 5 marks)

2. The square $PQRS$ is drawn on a centimetre square grid.



- (a) The coordinates of P are $(1, 5)$.
Write down the coordinates of Q , R and S .

Answer Q (..... ,)
 R (..... ,)
 S (..... ,)

(2)

- (b) Calculate the area of square $PQRS$.
You **must** show your working.
State the units of your answer.

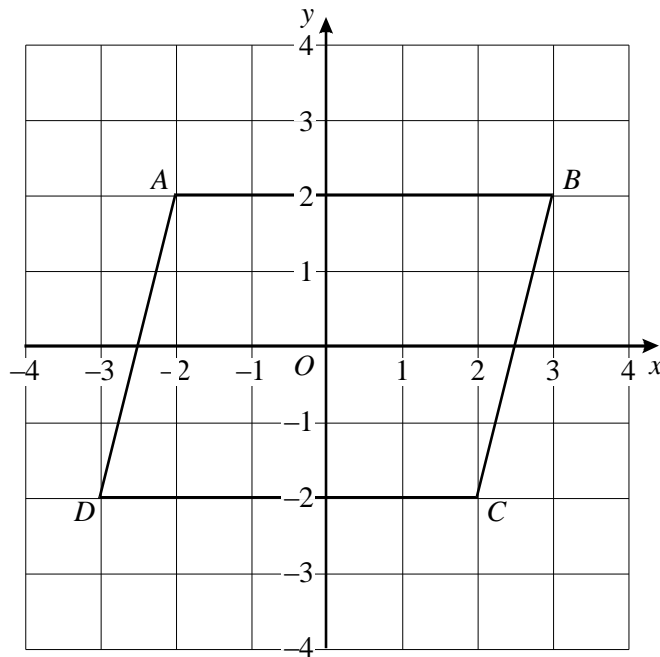
.....

Answer

(4)

(Total 6 marks)

3. The parallelogram $ABCD$ is drawn on a centimetre square grid.



(a) The coordinates of A are $(-2, 2)$.

Write down the coordinates of B , C and D .

Answer B (.....,) C (.....,) D (.....,) (2)

(b) Emma says that the perimeter of the parallelogram is more than 18 cm.
Explain why Emma is correct.

.....
.....
.....

(1)

(c) Calculate the area of the parallelogram.

.....
.....
.....

Answer cm^2

(2)(Total 5 marks)

Success:

Target: