Geometry

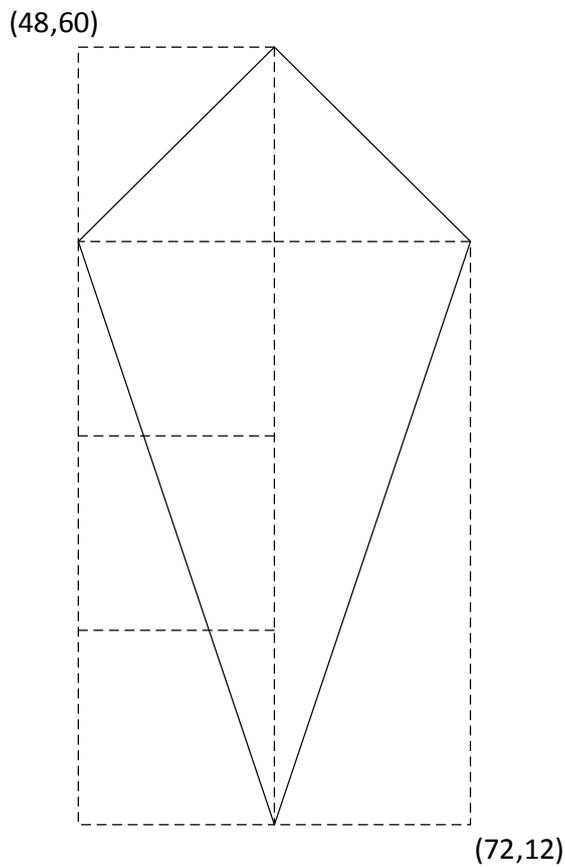## Midpoints and Endpoints

1.

A   B

E

G
C   D

F
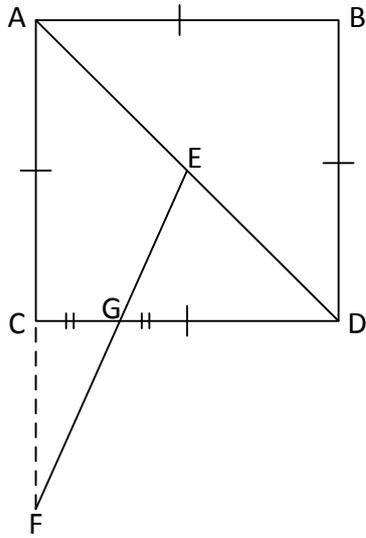
ABCD is a square.   A is at the co-ordinates (-17,12) and the midpoint of the square, E is at the co-ordinates (2, -7).

EF intercepts CD at the midpoint between C and the midpoint of CD. G is the midpoint of line EF.

ACF form a straight line.

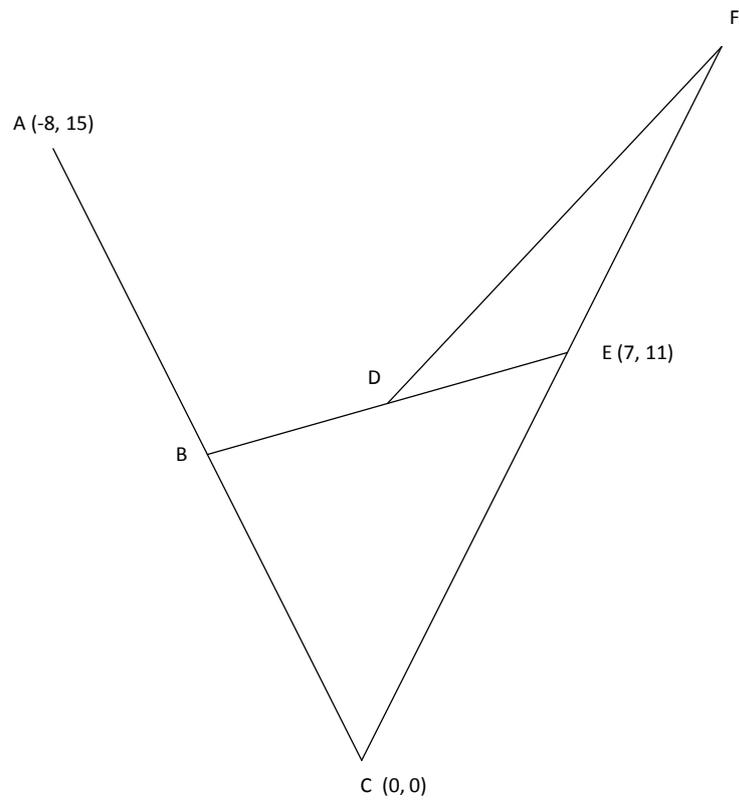What is the area of triangle CFG?

2.

(48,60)

(72,12)

The four dashed boxes on the left hand side of this diagram are all congruent squares.

The dotted cuboid on the right hand side is the same width as the dotted squares on the left.

What is the area of the kite?

3.

F

A (-8, 15)

E (7, 11)

D

B

C (0, 0)

Above, is a diagram of a sculpture. Points B,D and E are midpoints.

What are the areas of BCE and DEF?