

$$4^2 + 10^2 = 116$$

$$8^2 + 11^2 = 185$$

Find the area of shape BDEF

$$88 + 8 = 96$$

$$96 - 44 - 20 = 32 \text{ cm}^2$$

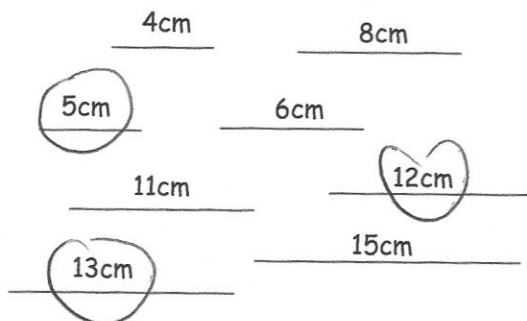
Find the perimeter of shape BDEF

$$7 + 2 + \sqrt{116} + \sqrt{185}$$

$$= 33.37 \text{ cm}$$

Ibrahim has 7 wooden rods, each with a different length.  
He wants to make a right angle triangle using 3 rods.

Circle the three suitable rods.



$$M = 4ac^2$$

$$a = 9.2 \times 10^{-6} \text{ and } c = 7.8 \times 10^4$$

Work out the value of M  
Give your answer in standard form correct to 2 significant figures.

$$M = 4 \times (9.2 \times 10^{-6}) \times (7.8 \times 10^4)^2$$

$$2.2 \times 10^5$$

a is doubled and c is doubled

Jordan says,

"The value of M will be four times larger because both a and c are doubled."

Explain why Jordan is wrong.

Since c is squared, M would be  $(2 \times 2^2)$  times larger, or 8 times larger.