

## Wednesday (answers) – LO: to calculate the area of a triangle (1)

### Varied fluency

#### Developing

- 1a.  $A = 2\text{cm}^2$ ,  $B = 4\text{cm}^2$ ,  $C = 9\text{cm}^2$   
2a.  $A = 16\text{cm}^2$ ,  $B = 8\text{cm}^2$   
3a.  $A = 4.5\text{cm}^2$ ,  $B = 18\text{cm}^2$ ,  $C = 4\text{cm}^2$

#### Expected

- 4a.  $B = 9\text{cm}^2$ ,  $A = 8\text{cm}^2$ ,  $C = 6\text{cm}^2$   
5a.  $A = 10\text{cm}^2$ ,  $B = 10\text{cm}^2$   
6a.  $A = 6\text{cm}^2$ ,  $B = 5\text{cm}^2$ ,  $C = 8\text{cm}^2$

#### Greater Depth

- 7a.  $B = 15\text{cm}^2$ ,  $C = 18\text{cm}^2$ ,  $A = 24\text{cm}^2$   
8a.  $A = 45\text{cm}^2$ ,  $B = 45\text{cm}^2$   
9a.  $A = 15\text{cm}^2$ ,  $B = 18\text{cm}^2$ ,  $C = 24\text{cm}^2$

### Reasoning and problem solving

#### Developing

- 1b. Various possible answers, for example: What is the difference between the area of the triangles? ( $4.5\text{cm}^2$ )  
2b. Sadia has added the lengths of the sides instead of calculating the area. The correct answers are:  $A = 4\text{cm}^2$ ,  $B = 8\text{cm}^2$ .  
3b. Various possible answers. Accept any triangle drawn with an accurate area of  $6\text{cm}^2$ .

#### Expected

- 4b. Various possible answers, for example: Which triangle has an area of  $3\text{cm}^2$ ? (C) How much bigger is the area of B than A? ( $6\text{cm}^2$ ) What is the total area of the triangles? ( $17\text{cm}^2$ )  
5b. Ellie has calculated the area of the rectangles but has not halved it to get the area of the triangles. The correct answers are:  $A = 6\text{cm}^2$ ,  $B = 4.5\text{cm}^2$ ,  $C = 6\text{cm}^2$ .  
6b. Various possible answers. Accept any triangle or triangles drawn with an accurate area of  $16\text{cm}^2$ .

#### Greater Depth

- 7b. Various possible answers. Two of the drawn triangles must have the same area. Check questions and answers for accuracy.  
8b. Lily has multiplied the total squares by 3 but they need to be multiplied by 2 because each square is worth  $2\text{cm}^2$ . The correct answers are:  $A = 9\text{cm}^2$ ,  $B = 12\text{cm}^2$ ,  $C = 3\text{cm}^2$ .  
9b. Various possible answers. Accept any triangle or triangles drawn with at least one side which is 15cm long and an accurate area of  $30\text{cm}^2$  where each square represents  $3\text{cm}^2$ .