

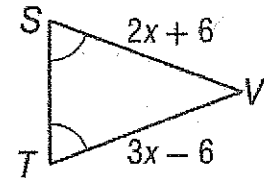
## ESK #2 Test 1 Part 2: Triangles

### BOX IN YOUR ANSWER AND JUSTIFICATION

#### Level 1.5 – Emerging Knowledge

1. Find the value of the variable. Justify your work.

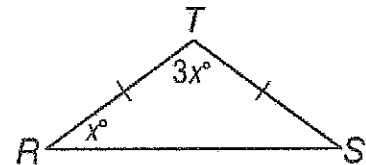
$x = 12$   
 isosceles triangle



#### Level 2.0 – Knowledge

2. a) Find the value of the variable. Justify your answer.

$x = 36$   
 isosceles triangle



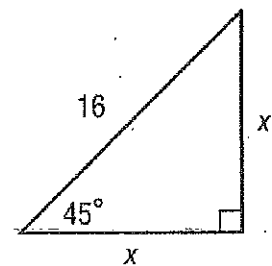
- b) Find the measure of each angle.

$\angle R = 36^\circ$   
 $\angle S = 36^\circ$   
 $\angle T = 108^\circ$

#### Level 3.0 – Comprehension

3. Find the value of the variable. Justify your answer.

$45^\circ - 45^\circ - 90^\circ$  triangle  
 $x = 8\sqrt{2}$



Level 3.5 - Application

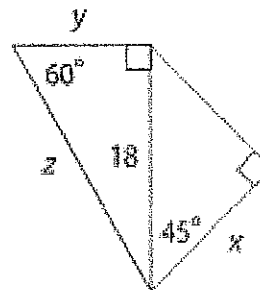
4. Find the value of each variable. Justify your answer.

$30^\circ-60^\circ-90^\circ$  triangle  
 $45^\circ-45^\circ-90^\circ$  triangle

$$x = 9\sqrt{2}$$

$$y = 6\sqrt{3}$$

$$z = 12\sqrt{3}$$



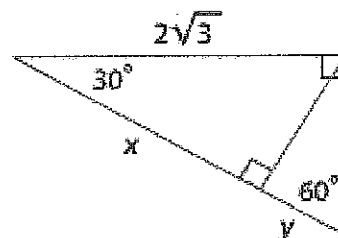
Level 4.0 - Synthesis

5. Find the value of each variable. Justify your answer.

$30^\circ-60^\circ-90^\circ$

$$x = 3$$

$$y = 1$$

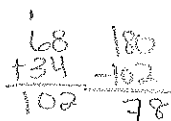
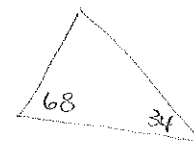
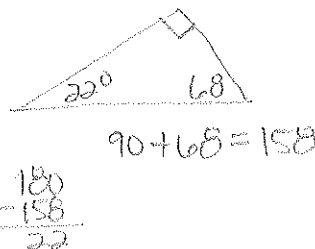
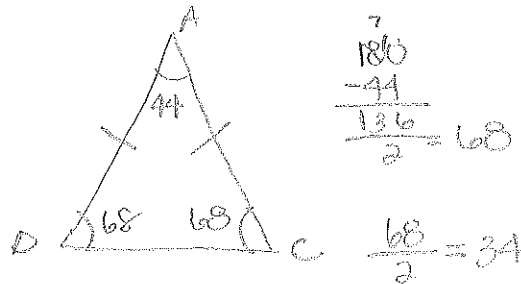
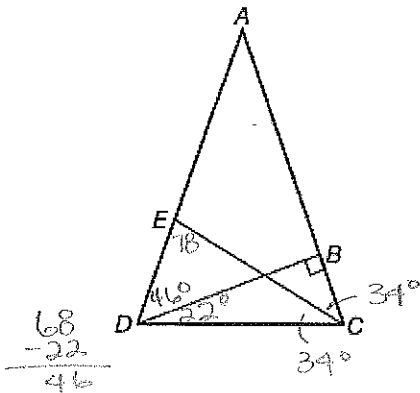


## ESK #2 Test 1 Part 2: Triangles

### BOX IN YOUR ANSWER AND JUSTIFICATION

**Level 5 - HONORS**

1. **Given:**  $AC = AD$ , and  $\overline{AB} \perp \overline{BD}$ ,  
 $m\angle DAC = 44$  and  
 $\overline{CE}$  bisects  $\angle ACD$ .  
 Find  $m\angle DEC = 78^\circ$



## ESK #2 Test 1 Part 2: Triangles

### BOX IN YOUR ANSWER AND JUSTIFICATION

**Level 5 - HONORS**

1. **Given:**  $AC = AD$ , and  $\overline{AB} \perp \overline{BD}$ ,  
 $m\angle DAC = 44$  and  
 $\overline{CE}$  bisects  $\angle ACD$ .  
 Find  $m\angle DEC$ .

