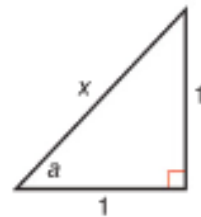


Activity 20

- a** The diagram shows an isosceles right-angled triangle.

The two shorter sides are 1 cm in length.

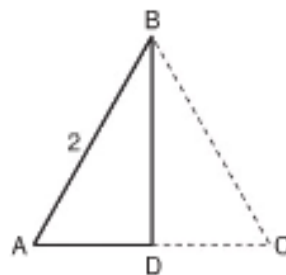
- (i) What is the exact value of x (the hypotenuse)?
(ii) What is the value of the angle marked a ?
(iii) Use your answers to parts (i) and (ii) to fill in the table below, giving exact answers.



$\sin 45^\circ =$	$\cos 45^\circ =$	$\tan 45^\circ =$
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- b** The diagram shows half an equilateral triangle ABC with sides of length 2 cm. D is the mid-point of AC .

- (i) Find the exact value of the length BD .
(ii) What are the values of the angles BAD and ABD ?
(iii) Use your answers to parts (i) and (ii) to fill in the table below, giving exact answers.



$\sin 30^\circ =$	$\cos 30^\circ =$	$\tan 30^\circ =$
$\sin 60^\circ =$	$\cos 60^\circ =$	$\tan 60^\circ =$