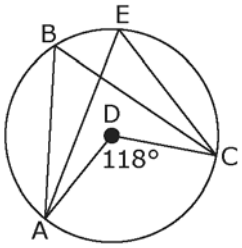
Name: _____ Date: _____

BLM 10–3

Section 10.1 Extra Practice

1. Calculate the measure of ∠ABC and ∠AEC. Explain how you got your answers.

a) ∠ADC is a(n) _____ angle.
(inscribed or central)



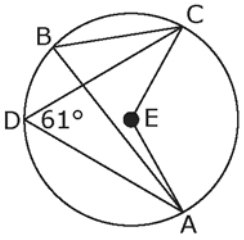
∠ABC and ∠AEC are _____ angles.
(inscribed or central)

Inscribed angles are _____ the size of central angles.

∠ABC and ∠AEC = ∠ADC ÷ 2

= _____°

b)



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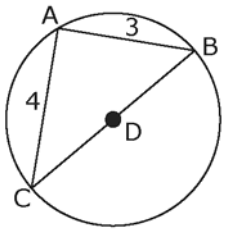
2. Calculate the length of chord BC in each of the following.

a) ∠BDC is a _____ angle that measures _____°.



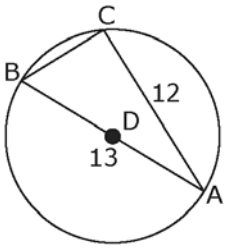
Since BC is the diameter and central angle, ∠BAC is the

_____ angle that measures _____°.

Use the Pythagorean relationship to find the length of BC.

$AB^2 + AC^2 = BC^2$

b)



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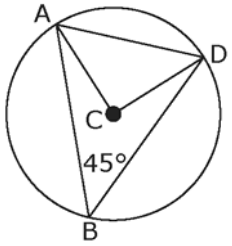
3. Point C is the centre of a circular flower bed.
The flower bed is divided as shown in the diagram.
Find the length of AD to the nearest tenth of a metre.
$\angle ABD = 45°$
radius = 8 m



$\angle ACD$ is the _____.

So, $\angle ACD$ = _____°.

AC and CD = _____ m

ΔACD is a _____ triangle, so you can use the Pythagorean relationship to find the length of AD.

$$CD^2 + AC^2 = AD^2$$

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