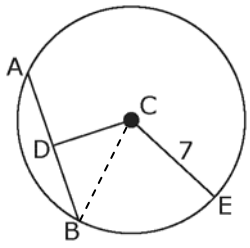
Name: _____ Date: _____

BLM 10–5

Section 10.2 Extra Practice

1. Find the length of CD to the nearest tenth.
D is the midpoint of AB.
AB is 8 units in length.



Label the diagram.

AD = _____

DB = _____

CB is a _____ of the circle. So, CB = _____.

$$CD^2 + DB^2 = CB^2$$

$$CD^2 + \square^2 = \square^2$$

$$CD^2 + \_\_\_\_\_ = \_\_\_\_\_$$

$$CD^2 \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_ - \_\_\_\_\_$$

$$CD = \sqrt{\square}$$

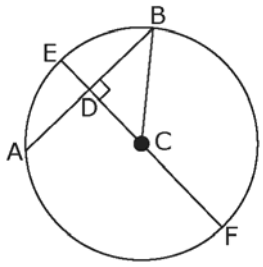
CD = _____

ISBN: 978–0–07–000219–7

Name: _____ Date: _____

BLM 10–5
(continued)

2. AB = 8 units
CD = 5 units.



a) Find the length of CB to the nearest tenth.

Label the diagram with measurements you know.

AB = _____, so AD = _____ and BD = _____.

ΔBDC is a _____ triangle, so use the Pythagorean relationship to find the length of CB.

$BD^2 + CD^2 = CB^2$

b) Find the length of ED.

C is the centre of the circle, so CB and CE are _____.

CD + ED = CE

5 + _____ = _____

_____ = ED

c) Find the length of EF.

EF is the diameter.

ISBN: 978–0–07–000219–7

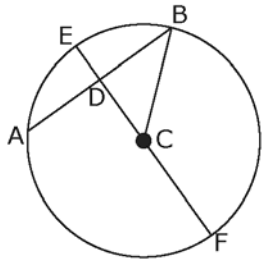
Name: _____ Date: _____

BLM 10–5
(continued)

3. Diameter EF = 24 units
Chord AB = 16 units
Find the lengths of CF, CB, BD, CD, and DE to the nearest tenth.

a) Label the diagram with measurements you know.

b) Find the lengths of CF and CB.



c) Diameter EF bisects chord AB at D.
Find the length of BD.

d) Find the length of CD.

ΔBDC is a _____ triangle, so use the Pythagorean relationship to find the length of CD.

$CD^2 + BD^2 = CB^2$

$CD^2 + \square^2 = \square^2$

Label the measure of CD on the diagram.

CE is the radius.

e) Find the length of DE.

ISBN: 978–0–07–000219–7