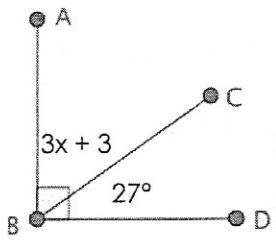
T3-01 Number _____ Name Key _____ Period _____

1) Use the figure below to answer the following.



a) What is the relationship between $\angle ABC$ and $\angle CBD$?

Complementary Angles

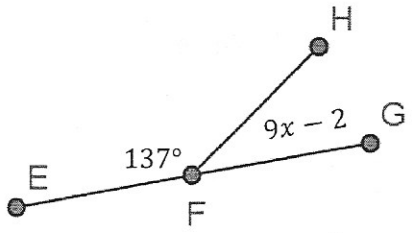
b) What is $m\angle ABC$? 63°

c) What is the value of x? Write an equation to help you.

X = 20

$3x+3=63$
$-3 \quad -3$
$\frac{3x}{3}=\frac{60}{3}$

2) Use the figure below to answer the following.



$9x-2=43$
$+2 \quad +2$
$\frac{9x}{9}=\frac{45}{9}$

a) What is the relationship between $\angle EFH$ and $\angle HFG$?

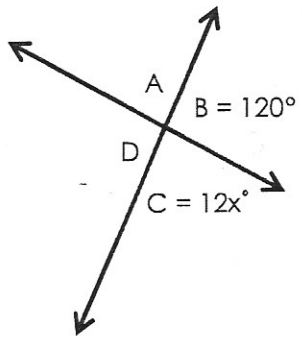
Supplementary Angles

b) What is $m\angle HFG$? 43°

c) What is the value of x? Write an equation to help you.

X = 5

3) Use the following figure to answer the following.



$\frac{12x}{12}=\frac{60}{12}$

a) What is the relationship between $\angle B$ and $\angle C$?

Supplementary

b) What is $m\angle D$? 120°

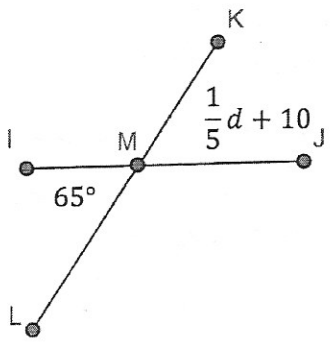
c) What is $m\angle A$? 60°

e) What is $m\angle C$? 60°

f) What is the value of x? Write an equation to help you.

X = 5

Use the following figure to answer the following.



$\frac{1}{5}d + 10 = 65$
$-10 \quad -10$
$\frac{5}{1} \cdot \frac{1}{5}d = 55 \cdot 5$
$d = 275$

a) What is the relationship between $\angle KMJ$ and $\angle IML$?

Vertical Angles

b) What is $m\angle IMK$? 115°

c) What is $m\angle LMJ$? 115°

d) What is $m\angle KMJ$? 65°

e) What is the value of d? Write an equation to help you.

d = 275