Get your homework out and have it ready to check. Target Check has been moved to tomorrow. Grab a Warm Up from the front table and get to work!

Classwork - L1 and L3 Review then ~~Target Check~~

1) Find the angle measurement of each angle using the information you are given.

$180 - 58 - 71 = 51°$

$109 - 58$

$\angle A = 51°$

$\angle B = 58°$

$\angle C = 71°$

$\angle D = 109°$

$\angle E = 71°$

$\angle F = 109°$

$\angle G = 71°$
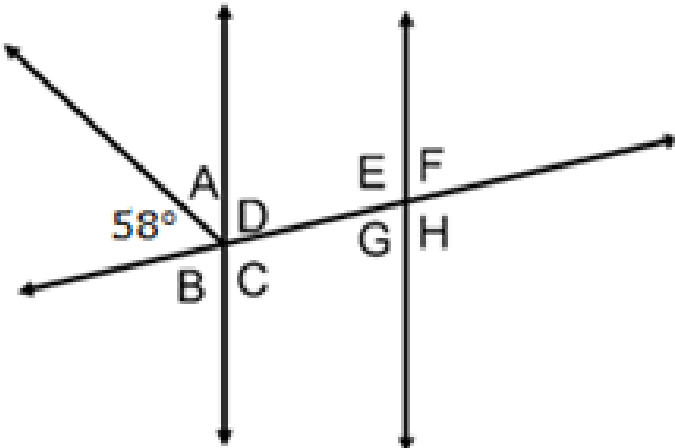
$\angle H = 71°$

$180 - 109$

109°
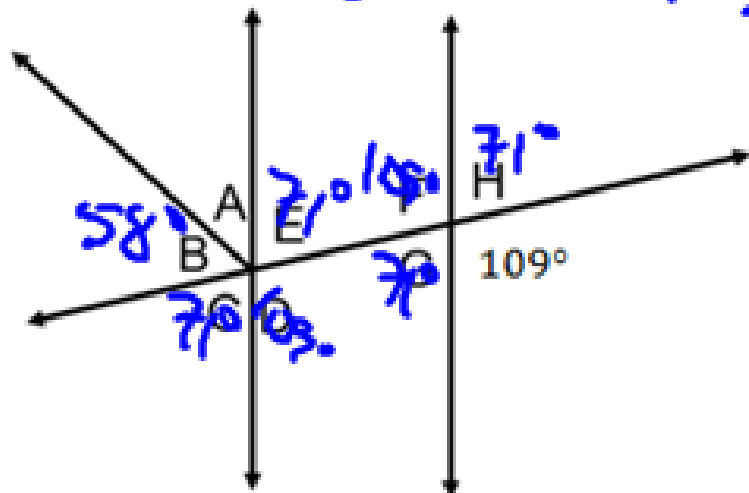
Correct #1

1) Find the angle measurement of each angle using the information you are given.

$\angle A =$ _____ $\angle B =$ _____ $\angle C =$ _____
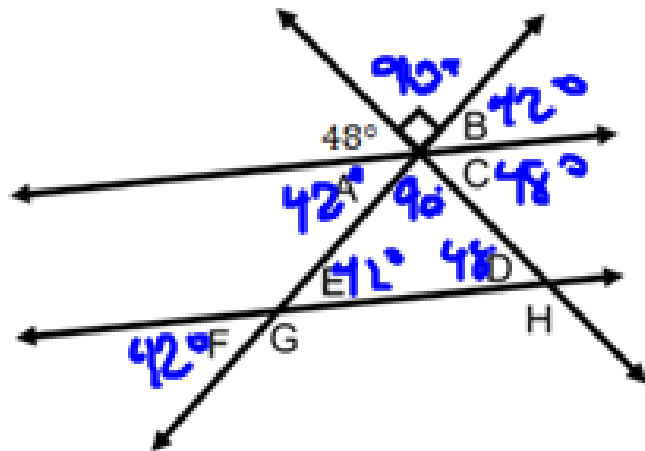
$\angle D =$ _____ $\angle E =$ _____ $\angle F =$ _____

$\angle G =$ _____ $\angle H =$ _____

2) Find the angle measurement of each angle using the information you are given.
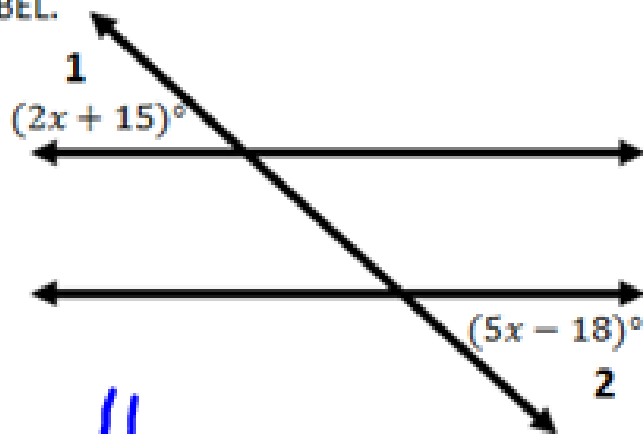
$180 - 48 - 90$

$\angle A = 42°$ $\angle B = 42°$ $\angle C = 48°$

$\angle D = 48°$ $\angle E = 42°$ $\angle F = 42°$

$\angle G = 138°$ $\angle H = 132°$

$180 - 42$ $180 - 48$

Diagram labels: $90°$, $48°$, $B\ 42°$, $C\ 48°$, $42°$, $90°$, $42°$, $48°$, $42°\ F$, G, H

3) Create an equation to find the value of x and the measure of the missing angle. SHOW WORK AND LABEL.

1 $(2x + 15)°$

$(5x - 18)°$ 2

$x = 11$

$\angle 1 = 37°$ $2(11) + 15$

$\angle 2 = 37°$ $5(11) - 18$

$2x + 15 = 5x - 18$
$-2x \qquad\quad -2x$
_____
$15 = 3x - 18$
$+18 \qquad +18$
_____
$\dfrac{33}{3} = \dfrac{3x}{3}$ $\quad \boxed{x = 11}$

4) Create an equation to find the value of *x* and the measure of the missing angle. SHOW WORK AND LABEL.

$180 - 85 = 95°$

Z

L

$85°$

$95°$

$(3x + 4)°$

K

$(2x + 6)°$

J
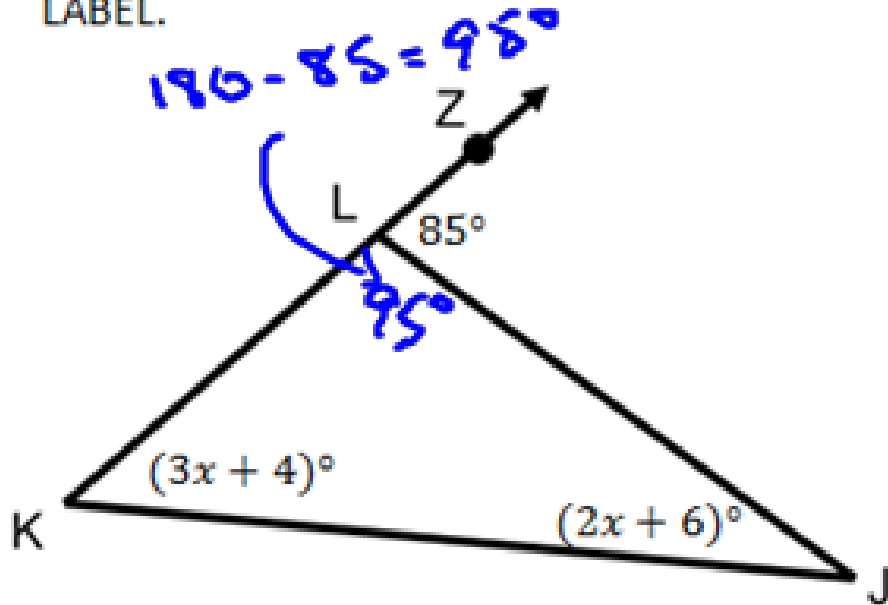
$x =$ __15__

$\angle JKL =$ __49°__ $3(15)+4$

$\angle LJK =$ __36°__ $2(15)+6$

$\angle KLJ =$ __95°__

$(3x + 4) + (2x + 6) = 85$

$5x + 10 = 85$
$ -10 -10$
_____
$\dfrac{5x}{5} = \dfrac{75}{5}$

$\boxed{x = 15}$

4) Create an equation to find the value of x and the measure of the missing angle. SHOW WORK AND LABEL.

A)

1

$(5x+12)^\circ$

117°

$5x+12 = 117$
$-12 -12$
——————————
$\dfrac{5x}{5} = \dfrac{105}{5}$

$x = 21$
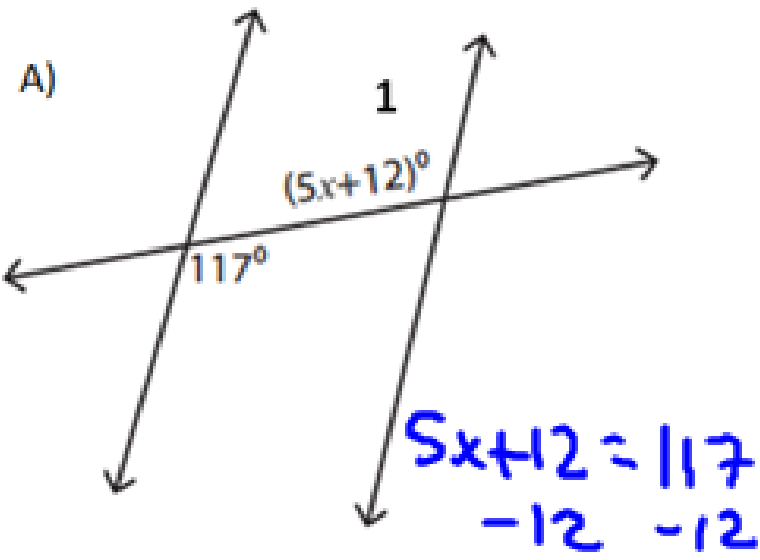
$x = \underline{21}$

$\angle 1 = \underline{117^\circ}$

$5(21)+12$

$105+12$

$4 = 117$

B)

132°

$3x+9$

2

$(3x+9)^\circ$
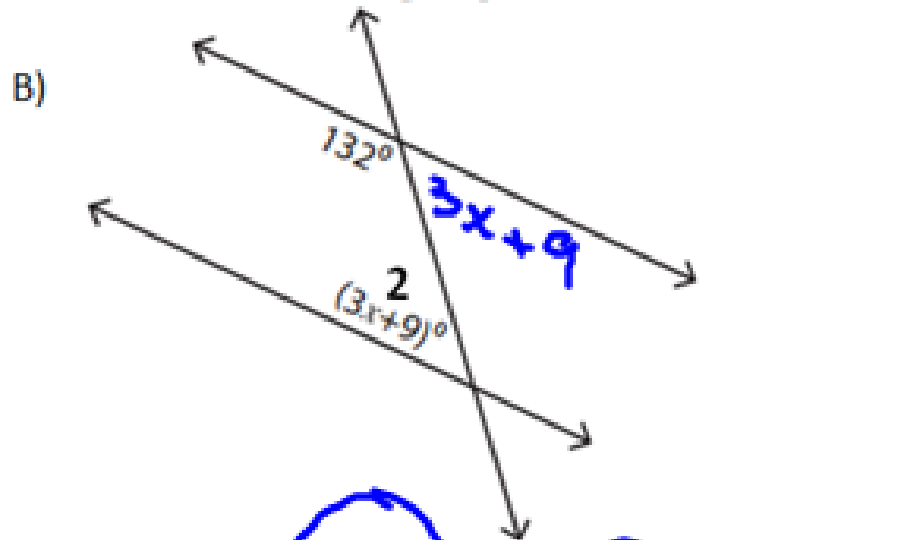
$\boxed{132} + 3x \boxed{+9} = 180$

$3x + 141 = 180$

$x = \dfrac{13}{48}$

$\angle 2 = \underline{48}$

$3(13)+9 = 48$

$\dfrac{3x}{3} = \dfrac{39}{3}$

$\boxed{x = 13}$

C)

4

$(2x+9)°$

$(4x-41)°$

3
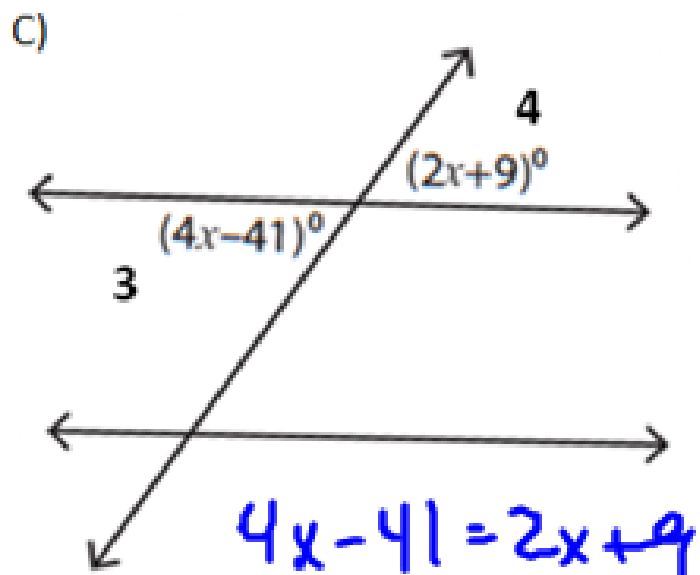
$4x-41=2x+9$

$-2x \quad\quad -2x$

$2x-41=9$

$+41 \quad +41$

$\dfrac{2x}{2}=\dfrac{50}{2}$

$x = \underline{25} \qquad x=25$

$\angle 3 = \underline{59°} \quad 4(25)-41$

$\angle 4 = \underline{59°} \quad 2(25)+9$

D)

$5x+12$

$5x+12 \quad 7x° \; 5$

6
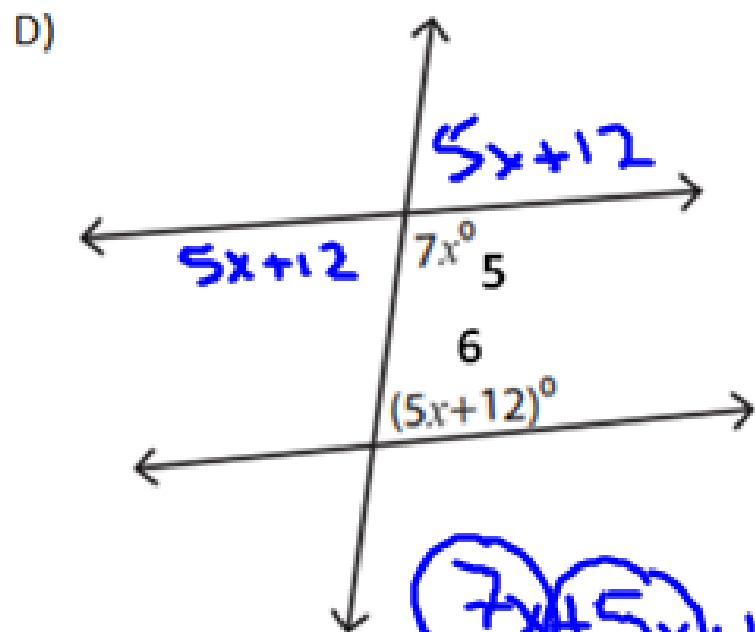
$(5x+12)°$

$\boxed{7x}\boxed{5x}+12=180$

$12x+12=180$

$\quad -12 \quad -12$

$\dfrac{12x}{12}=\dfrac{168}{12}$

$x=14$

$x = \underline{14}$

$7(14)$

$\angle 5 = \underline{98°}$

$5(14)+12 \quad \angle 6 = \underline{82°}$

5) Create an equation to find the value of x and the measure of the missing angle. SHOW WORK AND LABE

A)

P

$2x-5°$

$85°$

$30°$

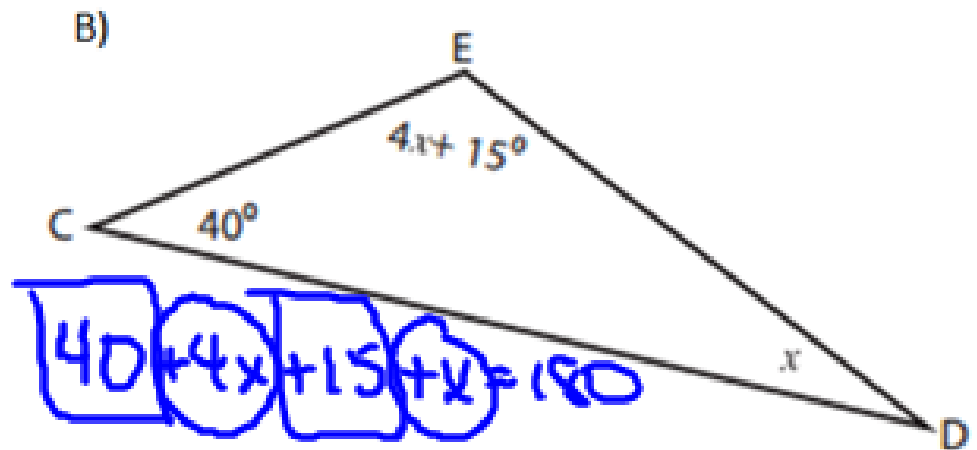Q

R

$2x \bigcirc{-5} + \bigcirc{30} + \bigcirc{85} = 180$

$2x + 110 = 180$

$\underline{-110 \quad -110}$

$\dfrac{2x}{2} = \dfrac{70}{2}$ $x = 35$

$65°$

$x = \underline{35}$ $\angle P = \underline{65}$

$2(35) - 5$

$70 - 5 = 65$

B)

E

$4x + 15°$

C $40°$

$40 + 4x + 15 + x = 180$

x

D

$5x + 55 = 180$

$\underline{-55 \quad -55}$

$\dfrac{5x}{5} = \dfrac{125}{5}$ $x =$

$x = \underline{25}$ $\angle D = \underline{25°}$ $\angle E = \underline{115°}$

$4(25) + 15$

$100 + 15$

C)

$2(50)+15$
$100+15$
$=115°$

$2x+15°$

$65°$

$180-115$

$45°$

$70°$
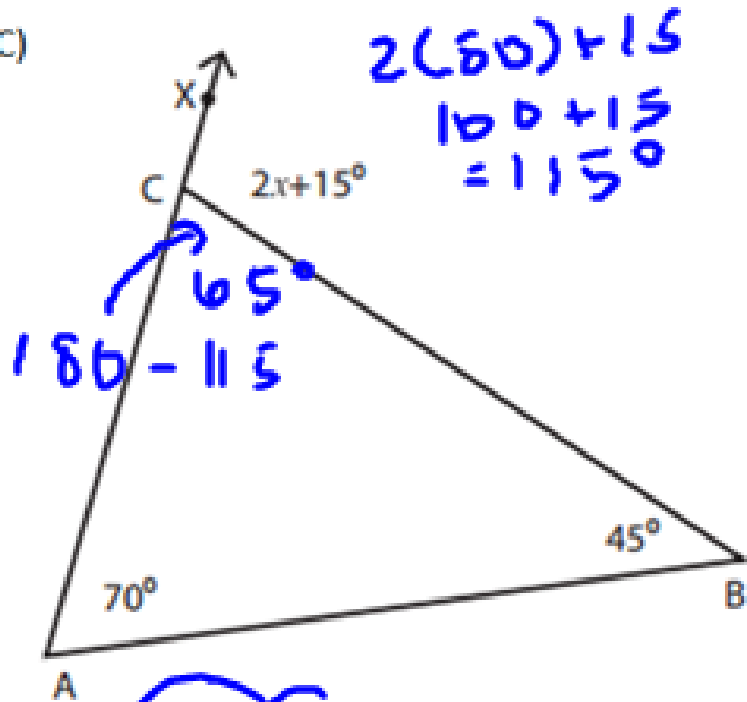
$(70)+(45)=2x+15$
$115=2x+15$
$-15 \qquad -15$
$\dfrac{100}{2}=\dfrac{2x}{2}$

$x=50$

$x=\underline{50}$

$\angle ACB = \underline{65°}$

$\angle BCX = \underline{115°}$

D)

$\angle BAX=100°$

$6(20)-20$

100 X

$6x-20°$ A

?
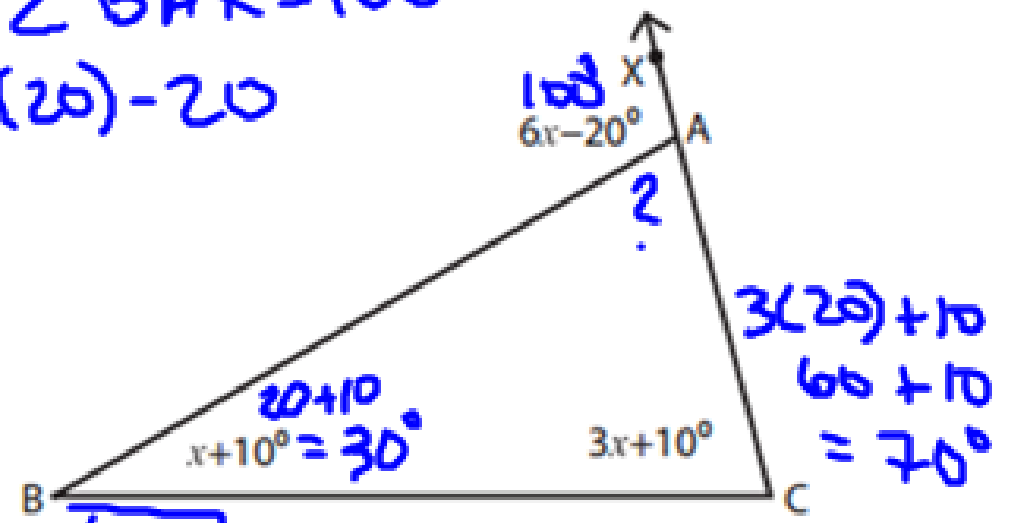
$20+10$
$x+10°=30°$

$3x+10°$

$3(20)+10$
$60+10$
$=70°$

$(x+10)+(3x+10)=6x-20$
$-4x+20=6x-20$
$\qquad -4x$
$20=2x-20$
$+20 \qquad +20$
$40=2x$
$x=\underline{20}$

$\angle BAC = \underline{80°}$

$\angle ACB = \underline{70°}$

$\angle BAX = \underline{100°}$

$\angle ABC = \underline{30°}$