Name: Key Date: _____

7R Classwork 10.5

Unit 10 Review

1) Fill in the blanks with the correct type of angle (acute, right, obtuse, straight)

a) A right angle is an angle that measures **exactly 90°**.

b) An acute angle is an angle that measures **less than 90°.**

c) An obtuse angle is an angle that measures **more than 90° but less than 180°.**

d) A straight angle is an angle that measures **exactly 180°.**

2) Which pair of angles is **supplementary**? → 180

~~A~~ 27° and 163° 190

~~B~~ 75° and 85° 160

C 76° and 104° 180

~~D~~ 84° and 6° 90

3) What is the **complement** of a 31° angle? → 90

A 31° B 59° C 90° D 149°

90 − 31 =

4) If the measure of an angle is 76°, what is the measure of its **supplement**? → 180

180 − 76 = 104°

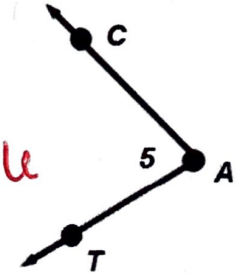
5) Which of the following is **not** a correct way to name the angle shown?

A ∠CAT ✓

B ∠TCA vertex not in the middle

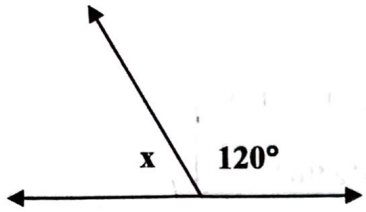
C ∠A ✓

D ∠5 ✓



#6-7 Name the angle relationship and find the measure of the missing angle in each of the following.

6)



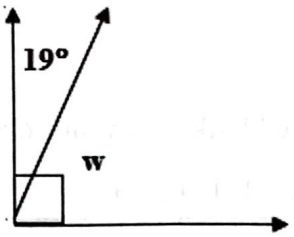
Supplementary

$x + 120 = 180$

$-120 \quad -120$

$x = 60°$

7)



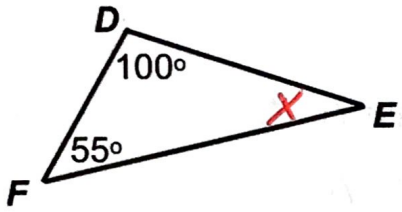
Complementary

$w + 19 = 90$

$-19 \quad -19$

$x = 71°$

8) Find the value of angle E in the triangle below.



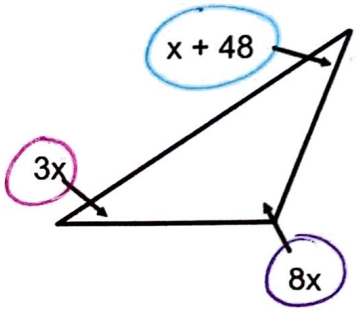
$x + 55 + 100 = 180$

$x + 155 = 180$

$-155 \quad -155$

$x = 25°$

9) Find the value of x in the triangle below.



$3x + 8x + 1x + 48 = 180$

$12x + 48 = 180$

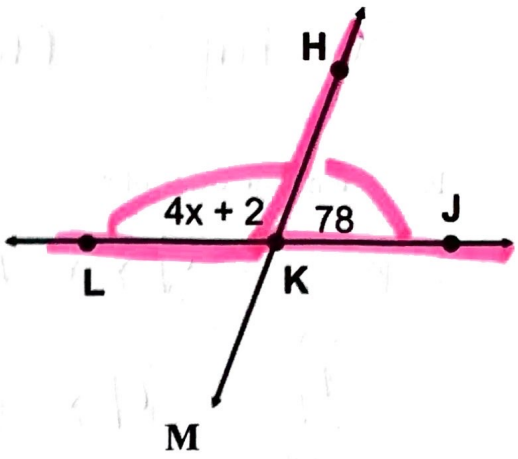
$-48 \quad -48$

$\frac{12x}{12} = \frac{132}{12}$

$x = 11°$

10) a. What is the angle relationship formed by $\angle HKL$ and $\angle HKJ$?

supplementary



B. Find the value x.

$4x + 2 + 78 = 180$

$4x + 80 = 180$

$-80 \quad -80$

$\frac{4x}{4} = \frac{100}{4}$

$x = 25°$

c. What is the measure of $\angle HKL$?

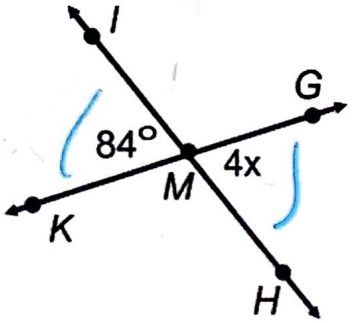
$4x + 2$

$4(25) + 2$

$102°$

11) a. What is the angle relationship formed by $\angle GMH$ and $\angle IMK$?

vertical

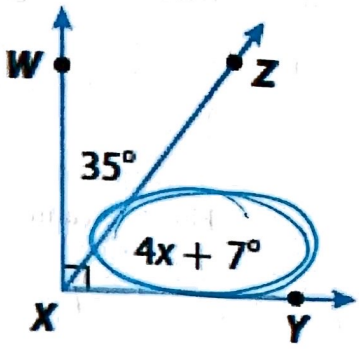


b. Find the value of x.

$\frac{84}{4} = \frac{4x}{4}$

$x = 21°$

12) a. What is the angle relationship shown below?



complementary

b. Find the value of x.

$35 + 4x + 7 = 90$

$42 + 4x = 90$

$-42 \quad -42$

$\frac{4x}{4} = \frac{48}{4}$

$x = 12$

c. What is the measure of ∠ZXY?

$4x + 7$

$4(12) + 7$

$55°$