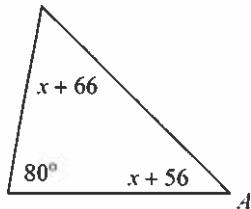


Angles in Triangles: Skill Building

Date _____

Write equations and determine the measure of angle A.

1)



$$x + 66 + x + 56 + 80 = 180$$

$$2x + 202 = 180$$

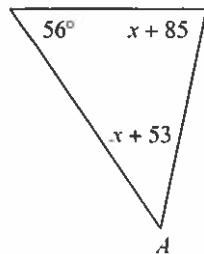
$$-202 -202$$

$$2x = -22$$

$$\div 2$$

$$x = -11$$

2)



$$56 + x + 85 + x + 53 = 180$$

$$2x + 194 = 180$$

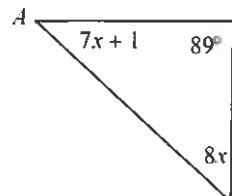
$$-194 -194$$

$$2x = -14$$

$$\div 2$$

$$x = -7$$

3)



$$7x + 1 + 89 + 8x = 180$$

$$15x + 90 = 180$$

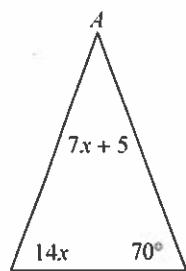
$$-90 -90$$

$$15x = 90$$

$$\div 15$$

$$x = 6$$

4)



$$14x + 7x + 5 + 70 = 180$$

$$21x + 75 = 180$$

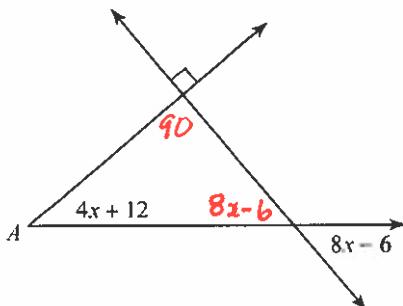
$$-75 -75$$

$$21x = 105$$

$$\div 21$$

$$x = 5$$

5)



$$4x+12 + 90 + 8x-6 = 180$$

$$12x + 96 = 180$$

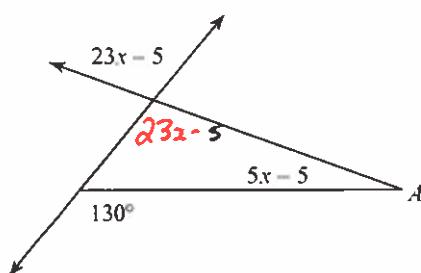
$$-96 \quad -96$$

$$12x = 84$$

$$\div 12$$

$$x = 7$$

6)



$$130 = 23x-5 + 5x-5$$

$$130 = 28x - 10$$

$$+10 \quad +10$$

$$140 = 28x \quad \div 28$$

$$x = 5$$

$$50 + 5x-5 + 23x-5 = 180$$

$$28x + 40 = 180$$

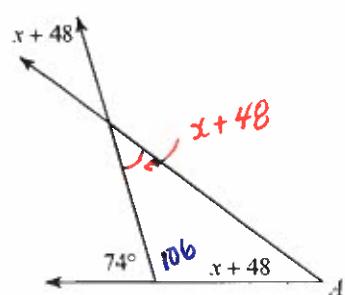
$$-40 \quad -40$$

$$28x = 140$$

$$\div 28$$

$$x = 5$$

7)



$$74 = x+48 + x+48$$

$$74 = 2x + 96$$

$$-96 \quad -96$$

$$-22 = 2x \quad \div 2$$

$$x = -11$$

$$106 + x+48 + x+48 = 180$$

$$20x + 2x = 180$$

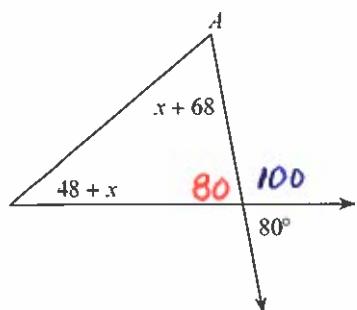
$$-20x \quad -20x$$

$$2x = -22$$

$$\div 2$$

$$x = -11$$

8)



$$100 = 48+x + x+68$$

$$100 = 2x + 116$$

$$-16 = 2x$$

$$x = -8$$

$$80 + 48+x + x+68 = 180$$

$$2x + 196 = 180$$

$$-196 \quad -196$$

$$2x = -16$$

$$\div 2$$

$$x = -8$$