

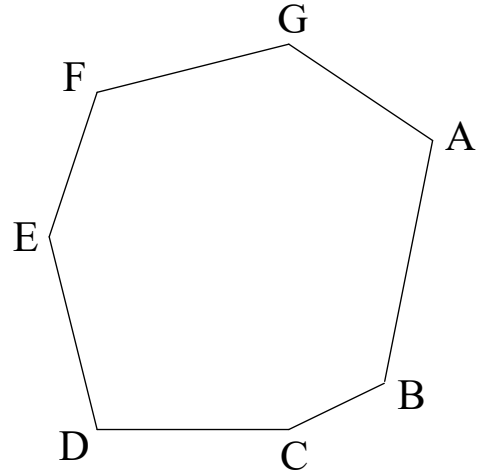
Naming polygons: start at a vertex (any vertex) and name that point; then pick a direction and walk around the polygon, naming the points IN ORDER.

Example: possible correct names for the heptagon (right) are:

- heptagon ABCDEFG
- heptagon BCDEFGA
- heptagon CDEFGAB
- heptagon DEFGABC
- etc.*

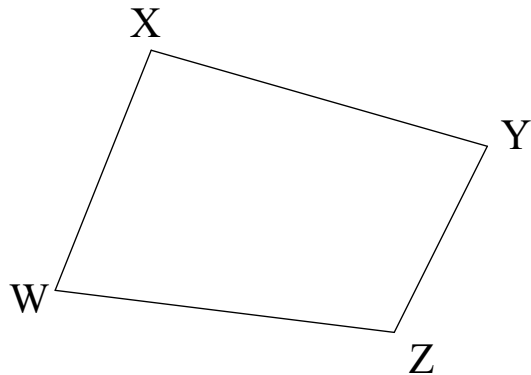
**or:**

- heptagon GFEDCBA
- heptagon FEDCBAG
- heptagon EDCBAGF
- etc.*



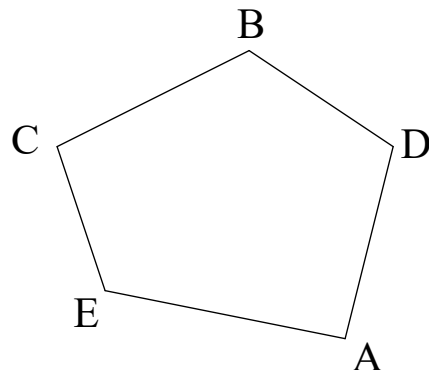
Give ALL POSSIBLE *CORRECT* names for this quadrilateral. There are 8.

1. quadrilateral \_\_\_\_\_
2. quadrilateral \_\_\_\_\_
3. quadrilateral \_\_\_\_\_
4. quadrilateral \_\_\_\_\_
5. quadrilateral \_\_\_\_\_
6. quadrilateral \_\_\_\_\_
7. quadrilateral \_\_\_\_\_
8. quadrilateral \_\_\_\_\_



Select all of the following *CORRECT* names (only!) for the polygon below.

- pentagon ABCDE
- pentagon DBCEA
- pentagon BCDAE
- pentagon EADBC
- pentagon CBDEA
- pentagon DAECB

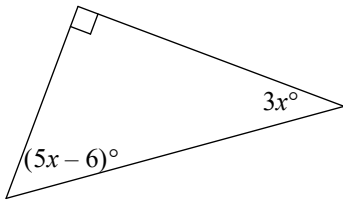


Naming Polygons &  
Problem Set – Interior Angles

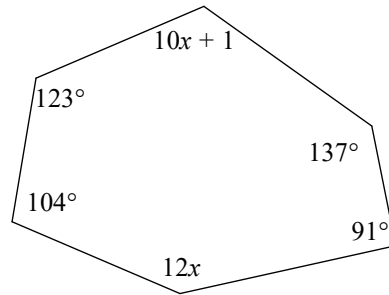
Name \_\_\_\_\_  
per \_\_\_ date \_\_\_\_\_

**Find the value of  $x$ .**

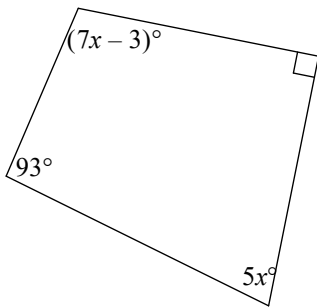
1.  $x =$  \_\_\_\_\_



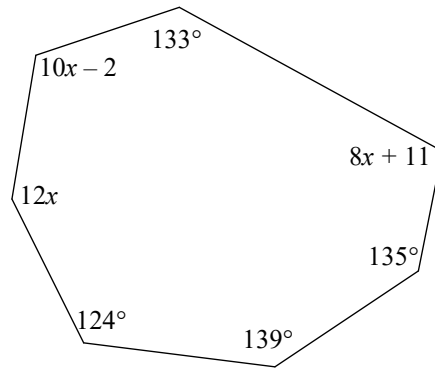
4.  $x =$  \_\_\_\_\_



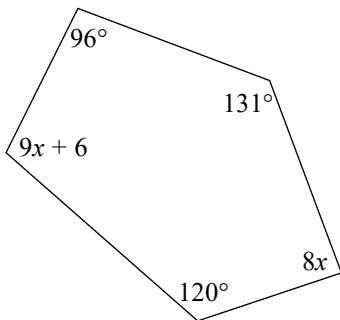
2.  $x =$  \_\_\_\_\_



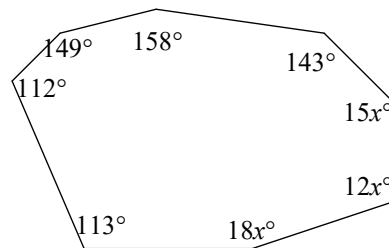
5.  $x =$  \_\_\_\_\_



3.  $x =$  \_\_\_\_\_



6.  $x =$  \_\_\_\_\_



# ANSWERS

Naming polygons: start at a vertex (any vertex) and name that point; then pick a direction and walk around the polygon, naming the points IN ORDER.

Example: possible correct names for the heptagon (right) are:

heptagon ABCDEFG

heptagon BCDEFGA

heptagon CDEFGAB

heptagon DEFGABC

*etc.*

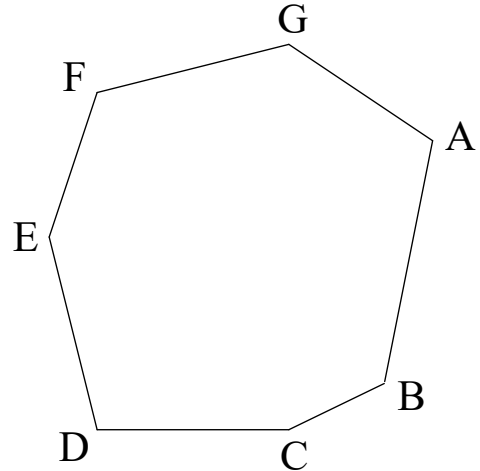
**or:**

heptagon GFEDCBA

heptagon FEDCBAG

heptagon EDCBAGF

*etc.*



Give ALL POSSIBLE *CORRECT* names for this quadrilateral. There are 8.

1. quadrilateral WXYZ

2. quadrilateral XYZW

3. quadrilateral YZWX

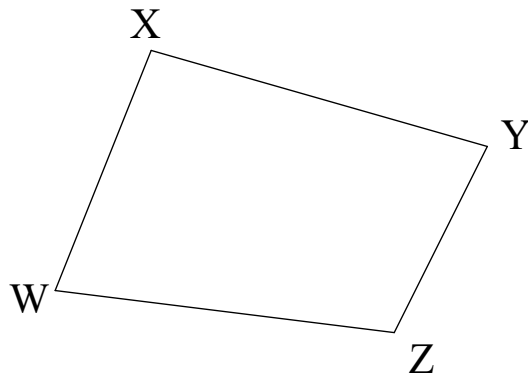
4. quadrilateral ZWXY

5. quadrilateral ZYXW

6. quadrilateral YXWZ

7. quadrilateral XWZY

8. quadrilateral WZYX



Select all of the following *CORRECT* names (only!) for the polygon below.

N pentagon ABCDE

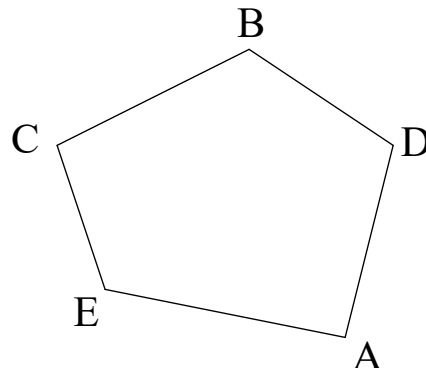
Y pentagon DBCEA

N pentagon BCDAE

Y pentagon EADBC

N pentagon CBDEA

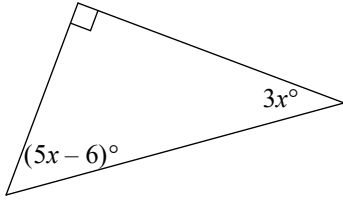
Y pentagon DAECB



# ANSWERS

**Find the value of x.**

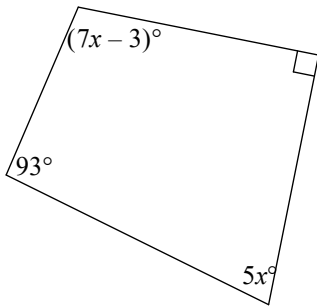
1.  $x = \boxed{12}$



$$8x + 84 = 180$$

$$8x = 96$$

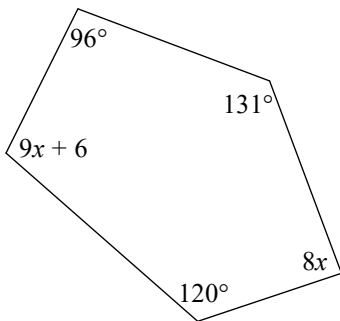
2.  $x = \boxed{15}$



$$12x - 180 = 360$$

$$12x = 180$$

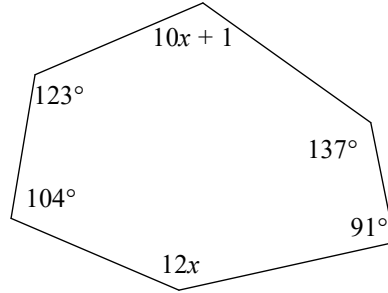
3.  $x = \boxed{11}$



$$17x + 353 = 540$$

$$17x = 187$$

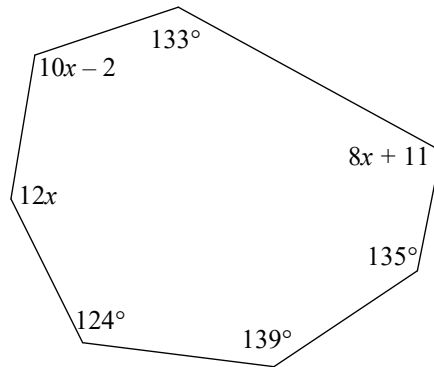
4.  $x = \boxed{12}$



$$22x + 456 = 720$$

$$22x = 264$$

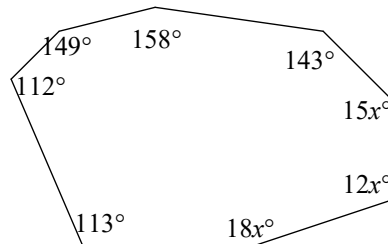
5.  $x = \boxed{12}$



$$30x + 540 = 900$$

$$30x = 360$$

6.  $x = \boxed{9}$



$$45x + 675 = 1080$$

$$45x = 405$$