

## Assignment Problems;

### Similarity & Congruence:

#### Exercise 8:

Q1)

A and G; B and E are congruent shapes

Q3)

**ABCD is a quadrilateral and a line through A parallel to BC meets DC at X. If angle D is equal to angle C, prove that triangle ADX is isosceles.**

Given: ABCD = quadrilateral  
AX parallel to BC  
angleBCD = angleADX

Since AX parallel to BC, then angleAXD = angleBCD and angle ADX

Since angleAXD = angleADX then AD = AX

Since AD = AX then triangleADX is isosceles.

#### Exercise 9:

Q1)

Area of triangle A =  $(6/3)^2 \times 4$

Area of triangle A =  $2^2 \times 4$

$$= 4 \times 4 = 16 \text{ cm}^2$$

Q4)

Area of Triangle A =  $\frac{1}{4} \times 58 = \frac{58}{4} = \frac{29}{2} = 14\frac{1}{2}$  square cm.

**Exercise 10:**

Q2) Volume of v =  $(\frac{27}{1}) \times 20$

$$= 540 \text{ cu.cm}$$

Q5) volume of v =  $(\frac{27}{8}) \times 24 = \frac{648}{8} = 81\text{cu.cm}$