

# Congruency

## ACMMG200 - Assessment (Answers)

Name: \_\_\_\_\_

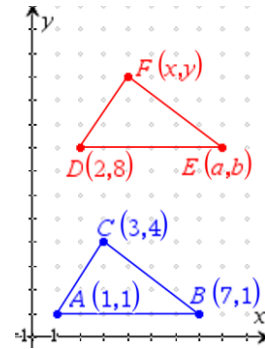
7 8 9 10 11 12



### Question: 1

Given  $\triangle ABC \cong \triangle DEF$ , then  $(a, b)$  equals:

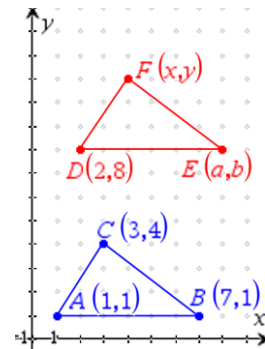
- a) (7, 1)      b) (8, 8)      c) (4, 11)  
d) (8, 11)      e) (9, 9)



### Question: 2

Given  $\triangle ABC \cong \triangle DEF$ , then  $(x, y)$  equals:

- a) (2, 2)      b) (3, 4)      c) (2, 6)  
d) (4, 11)      e) (5, 12)

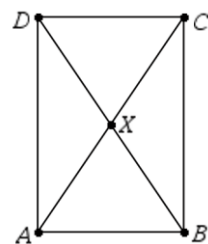


### Question: 3

Which of the following is **NOT** correct?

- a)  $\triangle ABX \cong \triangle DCX$       b)  $\triangle ADX \cong \triangle BCX$       c)  $\triangle DCB \cong \triangle DAB$   
d)  $\triangle ABD \cong \triangle ABC$       e)  $\triangle DAX \cong \triangle ABX$

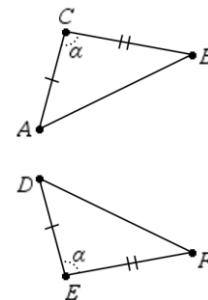
*ABCD is a rectangle*



### Question: 4

$\triangle ABC \cong \triangle DEF$ . The geometric reason is:

- a) SSS      b) AAA      c) ASA  
d) SAS      e) SSA



**Question: 5**

$\triangle ABC \cong \triangle DEF$ . Measurements for  $\triangle ABC$  are:  $AB=3$ ,  $AC=4$ ,  $BC=5$  & Area =  $6\text{cm}^2$ .

Given that only **ONE** of the following is **NOT** true, select the incorrect item.

- a)  $\overline{DE} = 3\text{cm}$     b)  $\angle CAB = \angle DEF$     c)  $\overline{EF} = 5\text{cm}$     d) Perimeter  $\triangle DEF = 12\text{cm}$     e) Area  $\triangle DEF = 6\text{cm}^2$

**Question: 6**

$\triangle ABC \cong \triangle DEF$ . Find  $(x, y)$  given: Coordinates  $\triangle ABC$  :  $A(1,3)$ ,  $B(1,7)$  and  $C(3, 5)$ .

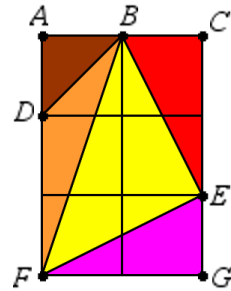
Coordinates  $\triangle DEF$  :  $D(4,7)$ ,  $E(4,11)$  and  $F(x, y)$ .

- a)  $(2, 9)$     b)  $(3, 5)$     c)  $(6, 10)$     d)  $(6, 7)$     e) None of these

**Question: 7**

Which statement is true about the diagram opposite? ( $ACGF = \text{Rectangle}$ )

- a)  $\triangle ABD \cong \triangle BCE$     b)  $\triangle BDF \cong \triangle BCE$     c)  $\triangle BDF \cong \triangle BCE$   
 d)  $\triangle BCE \cong \triangle EFG$     e)  $\triangle BEF \cong \triangle ABD$

**Question: 8**

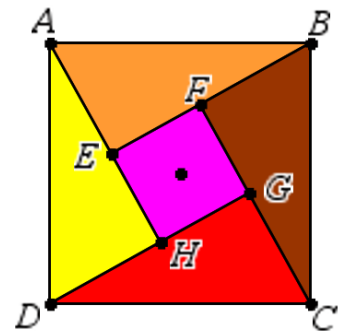
Which one of the following is **NOT** sufficient for testing the congruency of two triangles?

- a) ASA    b) AAS    c) AAA    d) SAS    e) SSS

**Question: 9**

Given  $\angle AEB=90^\circ$ ,  $AB=10\text{cm}$ ,  $AE=6\text{cm}$  &  $EB=8\text{cm}$ . Area EFGH equals:

- a)  $4\text{cm}^2$     b)  $6\text{cm}^2$     c)  $9\text{cm}^2$   
 d)  $10\text{cm}^2$     e)  $16\text{cm}^2$

**Question: 10**

Given  $\angle AED$  equal  $110^\circ$  then  $\angle EBC$  equals:

- a)  $35^\circ$     b)  $45^\circ$     c)  $70^\circ$   
 d)  $90^\circ$     e) None of these

*ABCD is a rectangle*

