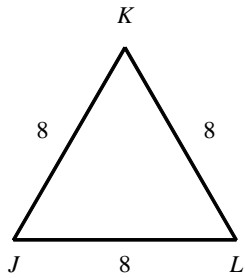

(Version 1) - Geometry Chapter 4 Test

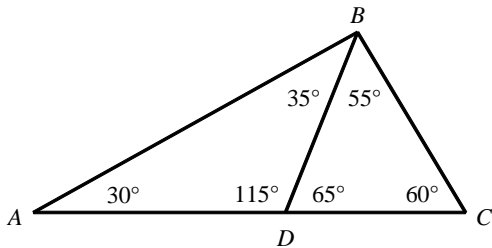
Do not write on this test. Use scratch paper. Don't forget to put your name and the version number (this test is version 1) on your ScanTron form.

1. Classify $\triangle JKL$.



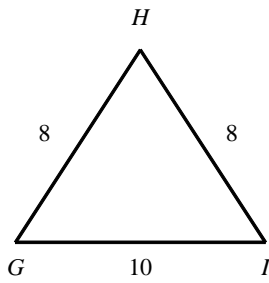
- [A] Equilateral [B] Isosceles [C] Scalene [D] none of these

-
2. Name a right triangle.



- [A] $\triangle ADB$ [B] $\triangle ABC$ [C] $\triangle BDC$ [D] none of these

3. Classify $\triangle GHI$.



[A] Equilateral

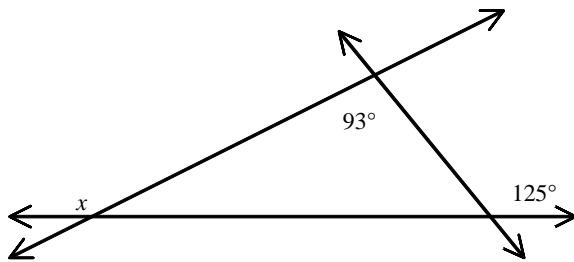
[B] Isosceles

[C] Scalene

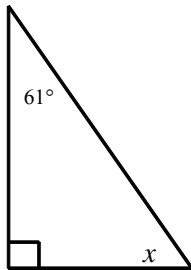
[D] none of these

4. Find the value of x .

[A] 125° [B] 87° [C] 32° [D] 148°



5. Find the value of x .



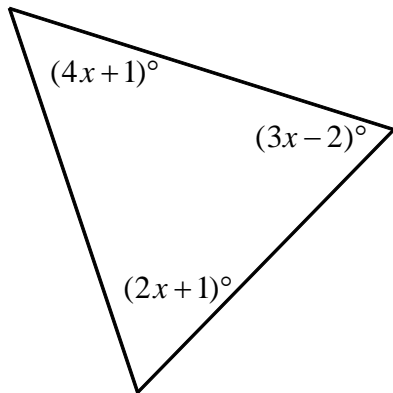
[A] 29°

[B] 119°

[C] 58°

[D] 151°

6. Find the measure of the interior angles to the nearest tenth. (Drawing is not to scale.)



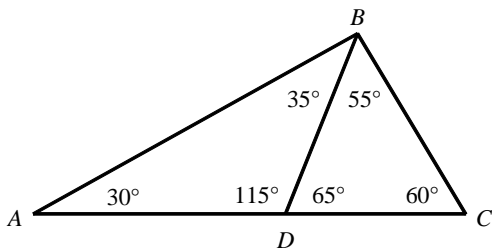
[A] 79.5° , 42.0° , 58.5°

[B] 80.4° , 45.1° , 54.5°

[C] 83.5° , 39.0° , 57.5°

[D] 81.0° , 41.0° , 58.0°

7. Name an acute triangle.



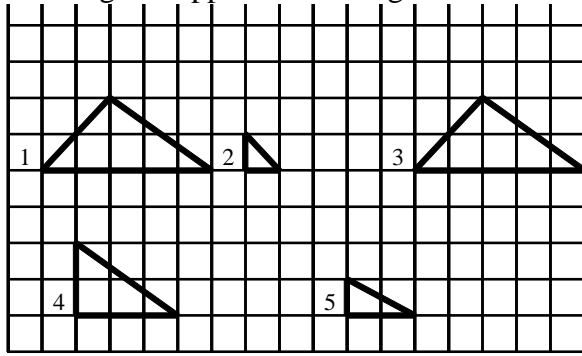
[A] $\triangle ADB$

[B] $\triangle BDC$

[C] $\triangle ABC$

[D] none of these

8. Which figures appear to be congruent?



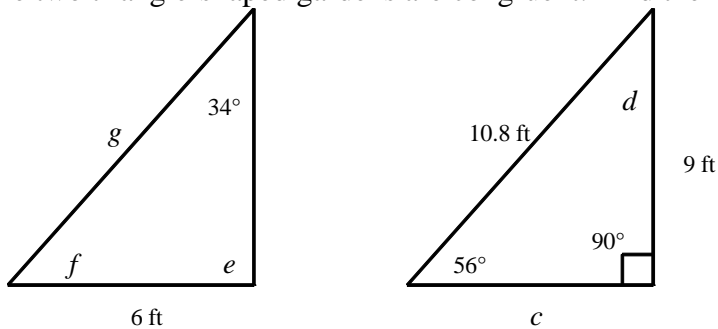
[A] 1 and 3

[B] 3 and 4

[C] 4 and 5

[D] 1, 3, and 4

9. The two triangle-shaped gardens are congruent. Find the missing side lengths and angle measures.



[A] $c = 6$ ft; $d = 34^\circ$; $e = 56^\circ$; $f = 90^\circ$; $g = 6$ ft

[B] $c = 6$ ft; $d = 34^\circ$; $e = 90^\circ$; $f = 56^\circ$; $g = 6$ ft

[C] $c = 9$ ft; $d = 34^\circ$; $e = 90^\circ$; $f = 56^\circ$; $g = 10.8$ ft

[D] $c = 6$ ft; $d = 34^\circ$; $e = 90^\circ$; $f = 56^\circ$; $g = 10.8$ ft

10. If $\triangle ABC \cong \triangle DEF$, $AB = 4$ feet, $m\angle B = 27^\circ$, and $m\angle F = 19^\circ$, which of the following statements is false?

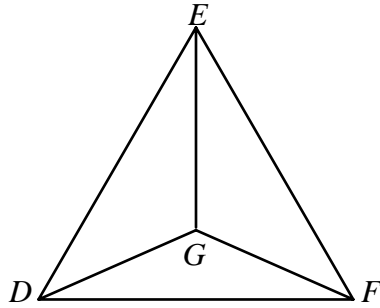
[A] $FD = 4$ ft

[B] $\angle D \cong \angle A$

[C] $m\angle A = 134^\circ$

[D] $ED = AB$

11. Refer to the figure below. Which of the following statements is true?



$\triangle DEF$ is equilateral. $\overline{DG} \cong \overline{FG}$

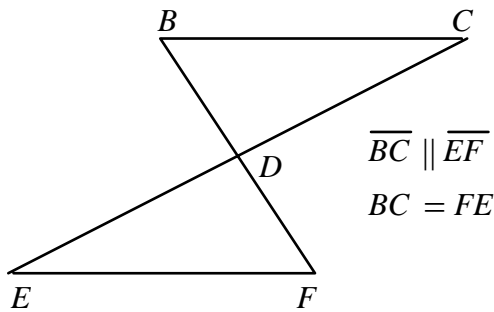
[A] There are no congruent triangles.

[B] $\triangle DGE \cong \triangle FGE$ by SSS

[C] $\triangle DFG \cong \triangle GED$ by SSS

[D] $\triangle DIG \cong \triangle FIG$ by SAS

12. Refer to the figure shown. Which of the following statements is true?



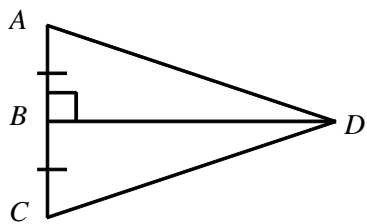
[A] $\triangle ABC \cong \triangle DFE$ by ASA

[B] $\triangle ABC \cong \triangle EFD$ by ASA

[C] $\triangle ABC \cong \triangle DFE$ by SAS

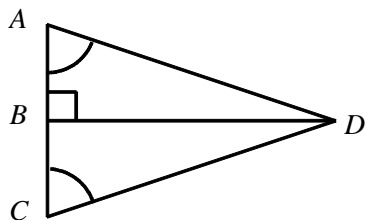
[D] $\triangle ABC \cong \triangle FED$ by ASA

16. $\triangle ABD \cong \triangle CBD$. Name the theorem or postulate that justifies the congruence.



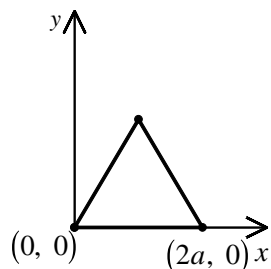
- [A] AAS [B] SAS [C] HL [D] ASA

-
17. $\triangle ABD \cong \triangle CBD$. Name the theorem or postulate that justifies the congruence.



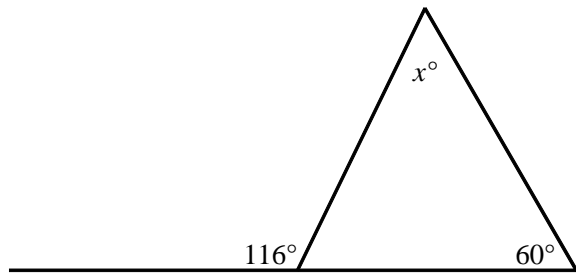
- [A] HL [B] ASA [C] AAS [D] SAS

-
18. An isosceles triangle is placed in a convenient position in the first quadrant of a coordinate plane. Which is the missing label for the vertex?



- [A] (a, b) [B] (a, a) [C] (b, c) [D] (b, b)

19. Find the value of x .



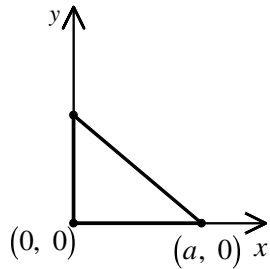
[A] 296

[B] 56

[C] 60

[D] 116

-
20. A right triangle is placed in a convenient position in the first quadrant of a coordinate plane. Which is the missing label for the vertex?



[A] (b, c)

[B] $(0, a)$

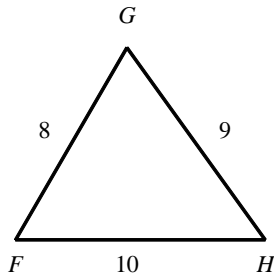
[C] (b, b)

[D] $(0, b)$

(Version 2) - Geometry Chapter 4 Test

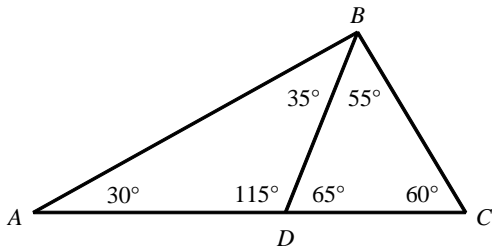
Do not write on this test. Use scratch paper. Don't forget to put your name and the version number (this test is version 2) on your ScanTron form.

1. Classify $\triangle FGH$.



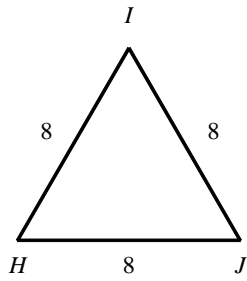
- [A] Equilateral [B] Isosceles [C] Scalene [D] none of these

-
2. Name an obtuse triangle.



- [A] $\triangle BDC$ [B] $\triangle ABC$ [C] $\triangle ADB$ [D] none of these

3. Classify $\triangle HIJ$.



[A] Scalene

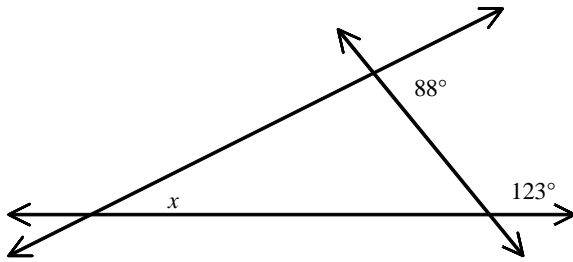
[B] Isosceles

[C] Equilateral

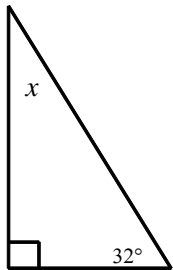
[D] none of these

4. Find the value of x .

[A] 92° [B] 149° [C] 31° [D] 123°



5. Find the value of x .



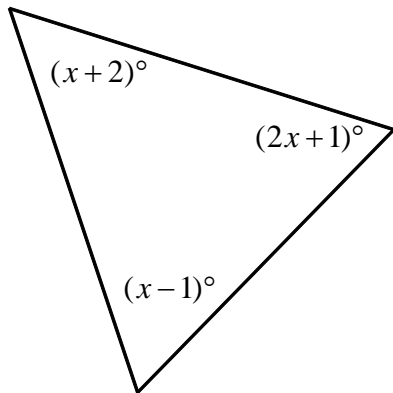
[A] 148°

[B] 122°

[C] 116°

[D] 58°

6. Find the measure of the interior angles to the nearest tenth. (Drawing is not to scale.)



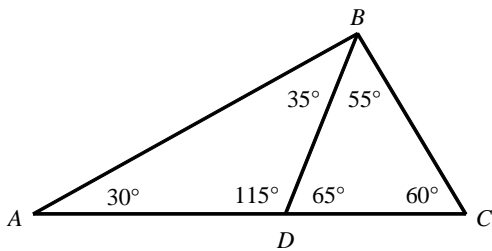
[A] 45.0° , 44.5° , 90.5°

[B] 46.5° , 43.5° , 90.0°

[C] 45.9° , 47.6° , 86.5°

[D] 49.0° , 41.5° , 89.5°

7. Name a right triangle.



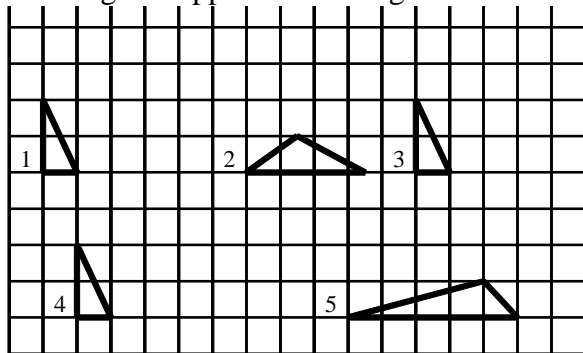
[A] $\triangle BDC$

[B] $\triangle ABC$

[C] $\triangle ADB$

[D] none of these

8. Which figures appear to be congruent?



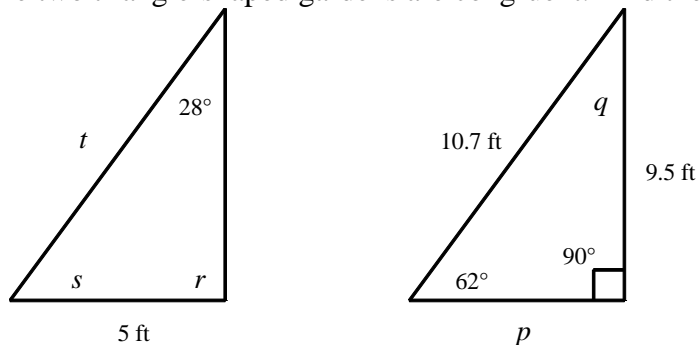
[A] 1, 2, and 4

[B] 1, 3, and 4

[C] 1 and 4 only

[D] 2 and 5

9. The two triangle-shaped gardens are congruent. Find the missing side lengths and angle measures.



[A] $p = 5$ ft; $q = 28^\circ$; $r = 62^\circ$; $s = 90^\circ$; $t = 5$ ft

[B] $p = 5$ ft; $q = 28^\circ$; $r = 90^\circ$; $s = 62^\circ$; $t = 5$ ft

[C] $p = 9.5$ ft; $q = 28^\circ$; $r = 90^\circ$; $s = 62^\circ$; $t = 10.7$ ft

[D] $p = 5$ ft; $q = 28^\circ$; $r = 90^\circ$; $s = 62^\circ$; $t = 10.7$ ft

10. If $\triangle ABC \cong \triangle DEF$, $AB = 23$ feet, $m\angle B = 25^\circ$, and $m\angle F = 21^\circ$, which of the following statements is false?

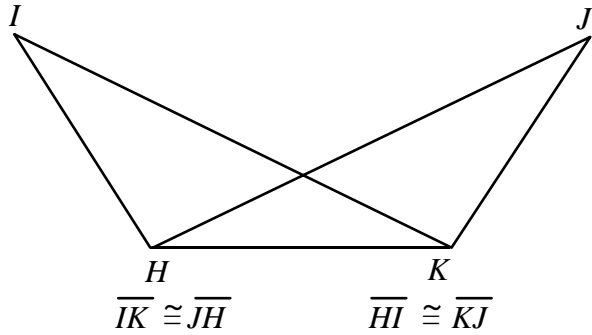
[A] $BC = EF$

[B] $AC = DF$

[C] $m\angle D = 134^\circ$

[D] $\angle B \cong \angle D$

11. Refer to the figure below. Which of the following statements is true?



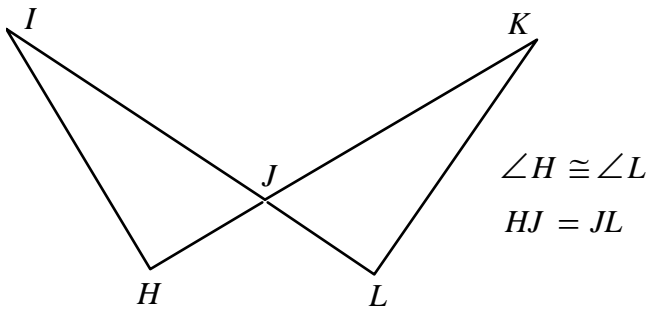
[A] There are no congruent triangles.

[B] $\Delta HJK \cong \Delta KIH$ by SSS

[C] $\Delta HKI \cong \Delta JKI$ by SSS

[D] $\Delta HIK \cong \Delta JIK$ by SAS

12. Refer to the figure shown. Which of the following statements is true?



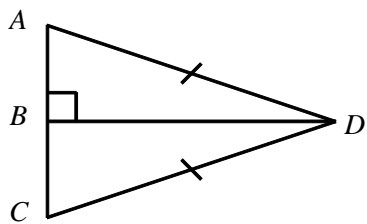
[A] $\Delta HIJ \cong \Delta LKJ$ by ASA

[B] $\Delta HIJ \cong \Delta JKL$ by SAS

[C] $\Delta HIJ \cong \Delta KLJ$ by ASA

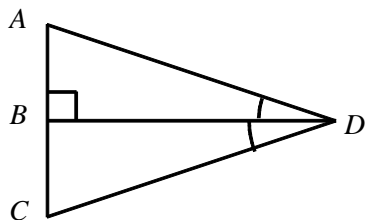
[D] $\Delta HIJ \cong \Delta KLJ$ by SAS

16. $\triangle ABD \cong \triangle CBD$. Name the theorem or postulate that justifies the congruence.



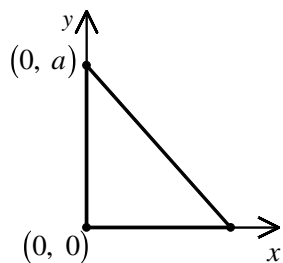
- [A] ASA [B] AAS [C] HL [D] SAS

-
17. $\triangle ABD \cong \triangle CBD$. Name the theorem or postulate that justifies the congruence.



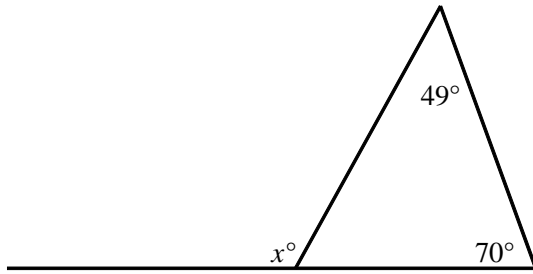
- [A] AAS [B] HL [C] ASA [D] SAS

-
18. An isosceles right triangle is placed in a convenient position in the first quadrant of a coordinate plane. Which is the missing label for the vertex?



- [A] $(0, a)$ [B] $(a, 0)$ [C] $(b, 0)$ [D] $(0, b)$

19. Find the value of x .



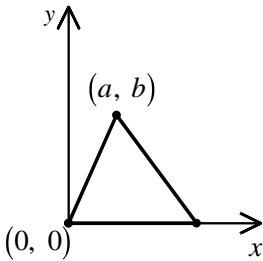
[A] 119

[B] 110

[C] 49

[D] 70

-
20. A scalene triangle is placed in a convenient position in the first quadrant of a coordinate plane. Which is the missing label for the vertex?



[A] $(a, 0)$

[B] $(0, c)$

[C] $(c, 0)$

[D] (c, d)