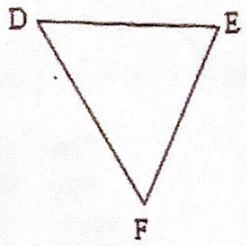
Name: Loz Class: Math Date: 5-17-2021 ID: A

Ch 13 Study Guide

_____ 1. Classify the triangle shown as right, obtuse, or acute.



measure of $\angle D = 40°$

measure of $\angle E = 60°$

measure of $\angle F = 80°$

Triangle DEF is a/an acute triangle.

Which word belongs in the box, *right*, *obtuse*, or *acute*?

C 2. Which of the following describes the properties of an isosceles triangle?

A. All the sides are equal.
B. It must have a right-angle.
C. It has 2 angles of the same size.
D. Its height must be equal to its base.

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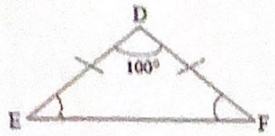
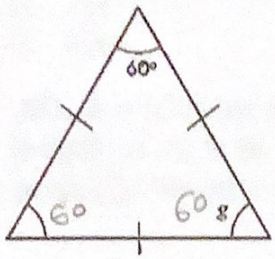
A 3. In triangle *DEF*, *DE* = *DF* and the measure of ∠*EDF* is 100°. Find the measure of ∠*DEF*.



180-100=80
80÷2=40

A. 40°
B. 80°
C. 100°
D. 130°

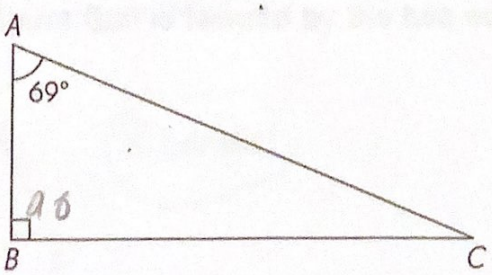
C 4. The following figure is not drawn to scale. Find the measure of ∠*g*.



∴ 180-60=120
120÷2=60

A. 20°
B. 40°
C. 60°
D. 80°

5. Triangle *ABC* is a right triangle.



90+69=159°
180-159=21°

a. Complete with <, >, or =.

$m\angle BAC$ > $m\angle ACB$

b. What is the difference in the angle measures of ∠*BAC* and ∠*ACB*? 48°

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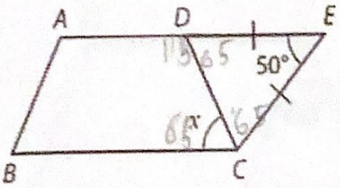
A 6. Find the measure of the unknown angle in the triangle.

90+64=154
180-154=26°.

A. 26°
B. 46°
C. 154°
D. 206°

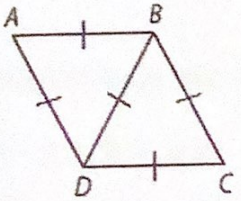
7. *JKL* is a triangle in which *JK* = 8 inches and *KL* = 11 inches. The length of *JL* is in whole inches and is greater than 15 inches. List the possible lengths of *JL*. 17, 19, 21.

____ 8.



DC is a line segment. Quadrilateral *ABCD* is a trapezoid and triangle *DCE* is an isosceles triangle. The measure of ∠DEC is 50°. Find the measure, in degrees, of ∠x. 180-50=130, 130÷2=65, 180-65=115 (65°)

____ 9. Name the figure that is formed by the two equilateral triangles shown.



Rhombus

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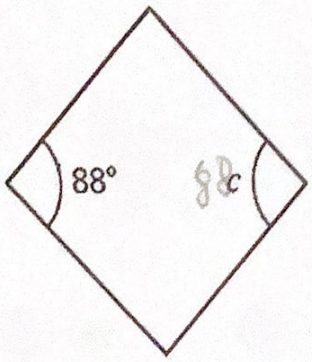
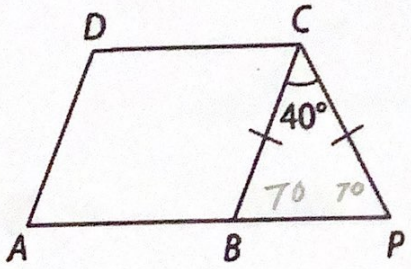
C 10. The rhombus is not drawn to scale. Find the measure of $\angle c$.



A. 17°
B. 77°
C. 88°
D. 97°

11. In this figure, $\overline{AP}$ is a line segment. Quadrilateral ABCD is a parallelogram and triangle BPC is isosceles. Find the measure, in degrees, of $\angle DCB$.

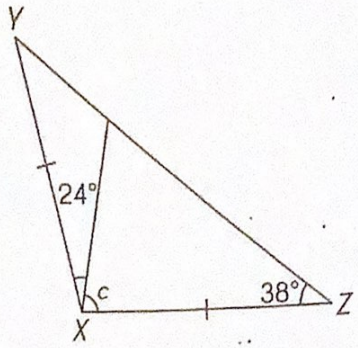


180-40=140
140÷2=70
180-70=110
110°

D 12. Which of these sets of side lengths of a triangle is possible?

(A) 4 ft, 9 ft, 5 ft
(B) 5 cm, 5 cm, 10 cm
(C) 6 in., 7 in., 8 in.
(D) 3 m, 6 m, 3 m

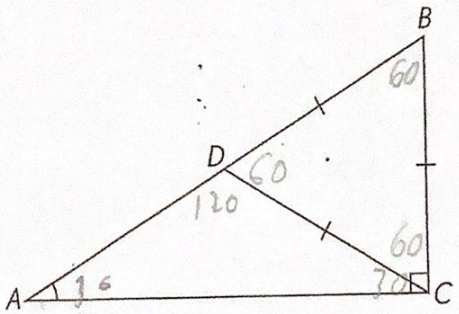
13. Triangle XYZ is an isosceles triangle. Find the measure of $\angle c$.



180 − 76 = 104°
104°
104 − 24 = 80°
80°

(A) 142° (B) 120° (C) 104° (D) 80°

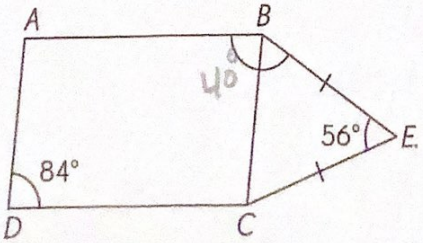
14. Triangle ABC is a right triangle and BCD is an equilateral triangle. Find the measure of $\angle DAC$.



180 − 60 = 120
120 ÷ 2 = 60
60 ÷ 2 = 30

(A) 30° (B) 60° (C) 120° (D) 50°

15. $ABCD$ is a parallelogram where $\overline{AB} \parallel \overline{DC}$. Triangle BCE is an isosceles triangle. Find the measure of $\angle ABE$.



56 + 84 = 140
180 − 140 = 40
40°

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