Unit 5 Day 7

Quiz Day

Homework Information
Add this to your outline!!

Packet Pages 15-16

- Practice from Day 1 Classifying Triangles (notes on notebook paper)

Finish Notes p. 14-15

&

Print Next Packet

1) After flying at an altitude of 9 km, an airplane starts to descend when its ground distance from the landing field is 175 km. What is the angle of depression for this portion of the flight?

2) A ski slope is 550 yards long with an angle of depression of 14 degrees. Find the vertical drop of the slope.

3) The San Jacinto Column near Houston Texas is 570 feet tall. If the angle of elevation for Derrick's line of sight is 75 degrees and his eyes are 6 feet from the ground, how far is he from the base of the column?

4) Jimmy is 24 feet up a tree. His mom is 7 feet from the tree, telling him to come down. How far is Jimmy from his mom?

5) Solve the Triangle ABC given $a = 18, b = 22, and \_ m\angle A = 20°$

Round to the tenths place.

Warm-Up ANSWERS: Quiz Day!

1) After flying at an altitude of 9 km, an airplane starts to descend when its ground distance from the landing field is 175 km. What is the angle of depression for this portion of the flight? **About 2.9 degrees**

2) A ski slope is 550 yards long with an angle of depression of 14 degrees. Find the vertical drop of the slope.

Approximately 133 yds

3) The San Jacinto Column near Houston Texas is 570 feet tall. If the angle of elevation for Derrick's line of sight is 75 degrees and his eyes are 6 feet from the ground, how far is he from the base of the column?

Approximately 151.1 ft

4) Jimmy is 24 feet up a tree. His mom is 7 feet from the tree, telling him to come down. How far is Jimmy from his mom?   **25 ft**

Warm-Up Answers

5. Solve the Triangle completely given the following about $\triangle ABC$:

$$a = 18, b = 22, and \_ m\angle A = 20°$$

Round answers to the tenths place.

$Case\#1$

$m\angle B_1 = 24.7°$

$m\angle C_1 = 135.3°$

$c_1 = 37.0$

$Case\#2$

$m\angle B_2 = 155.3°$

$m\angle C_2 = 4.7°$

$c_2 = 4.3$

HW Answers: Packet Page 10

1)   A. 14.74   B. 46.90
     C. 103.91   D. 17.37
     E. 53.47   F. 32.30

2A) z = 39.08, m∠Y = 19.00, m∠X = 39

 B) m∠I = 87.80 , m∠H = 32.20, m∠G = 60

 C) m = 30.50, m∠O = 54.2, m∠N = 63.8

3) m∠B = 129.8, m∠A = 16.2, m∠C = 34

4) 89 miles

5) 30 cm²

HW Answers
Packet Page 12 odds & Question #18

11. m∠F = 22, f = 11 (using E)   OR   f = 9 (using D) **

13. b = 91,   m∠A = 31, m∠C = 25

15. x = 14

17. m∠A = 39

18. m∠DGF = 132

Quiz Time!!

Clear Your Desk Of Everything BUT

A Pencil

And A Calculator.

Think Positive, YOU GOT THIS!!

# Review of Notes Day 1 on Classifying Triangles

Classifying Triangles By Their Angles:

- Acute Triangle
  - An acute triangle is a triangle that has **All Acute Angles**

- Obtuse Triangle
  - An obtuse triangle is a triangle that has **One Obtuse Angle**

- Right Triangle
  - A right triangle is a triangle that has **One Right Angle**
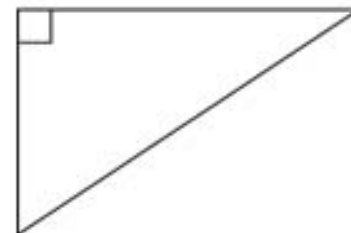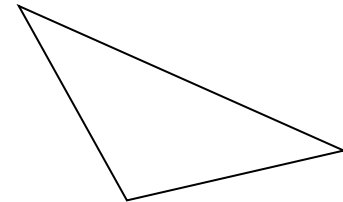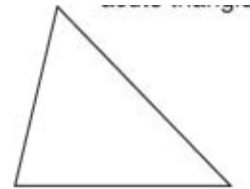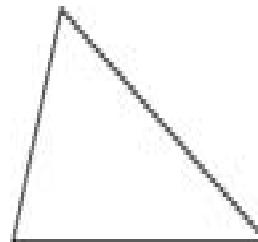
Classifying Triangles By Their Angles:

- Oblique Triangle
  - An oblique triangle is a **Non-Right Triangle**
  - These can be **Acute** triangles or **Obtuse** triangles

- Equiangular Triangle
  - An equiangular triangle is a triangle that has **All Congruent Angles**
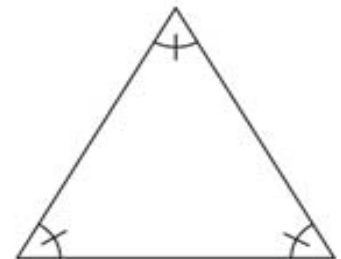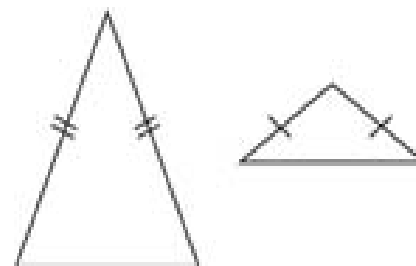
Classifying Triangles By Their Sides:

- Scalene Triangle
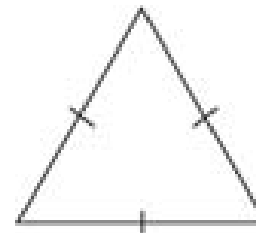 - A scalene triangle is a triangle that **No Congruent Sides**

- Isosceles Triangle
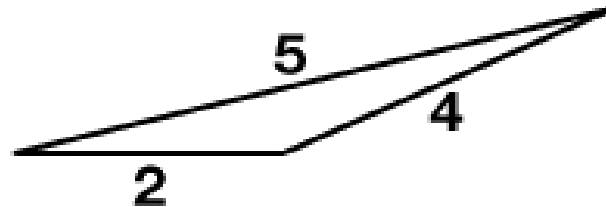 - An isosceles triangle is a triangle that has **At least two congruent sides**

- Equilateral Triangle
  - An equilateral triangle is a triangle that has **All congruent sides**

Examples

Classify the triangle by its sides and its angles.

The three sides of the triangle have three different lengths, so the triangle is scalene.

One angle has a measure greater than 90, so the triangle is obtuse.

∴ The triangle is an obtuse scalene triangle.

These 3 dots are notation for "therefore". ☺

Examples

A triangle with a 90° angle has sides that are 3 cm, 4 cm, and 5 cm long.
Classify the triangle.

The three sides of the triangle have three different lengths, so the triangle is scalene.

One angle has a measure of 90, so the triangle is right.

∴ The triangle is a right scalene triangle.

These 3 dots are notation for "therefore". ☺