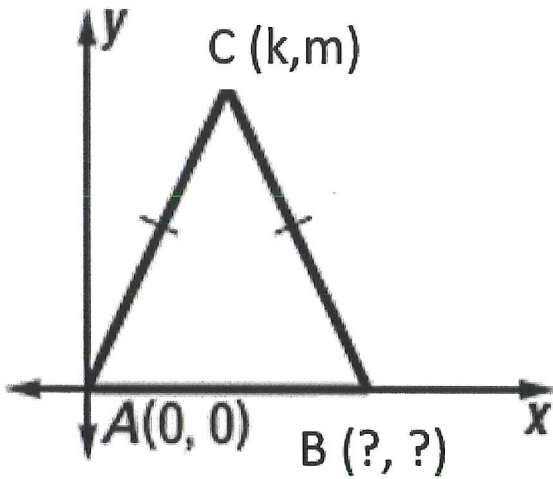
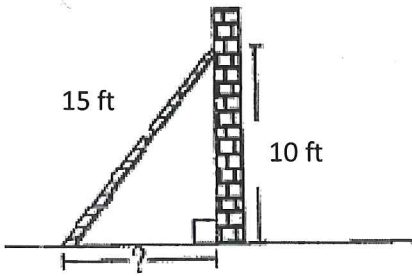


Triangle Review FAQ

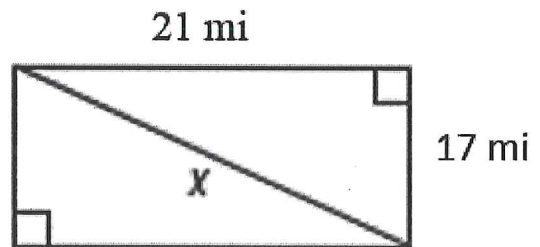
1. Find the missing coordinates of each triangle. 2. Classify the triangle by its sides and angles given the two angle measure are 12° and 84° .



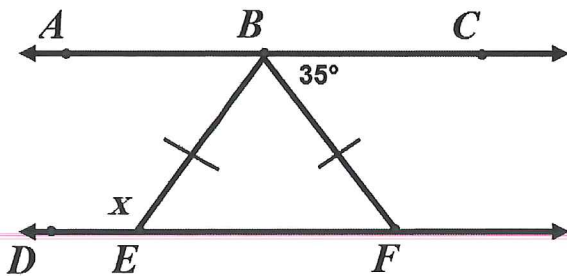
3. A ladder is 15ft long and reaches 10 feet up a wall, as shown in the picture. How many feet is the bottom of the base of the wall?



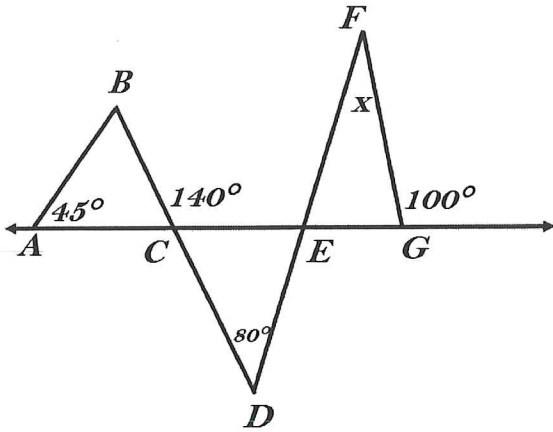
4. Find the value of x.



5. In the figure below, B is on \overline{AC} , E is on \overline{DF} , \overline{AC} is parallel to \overline{DF} , and \overline{BE} is congruent to \overline{BF} . What is the measure of $\angle DEB$?



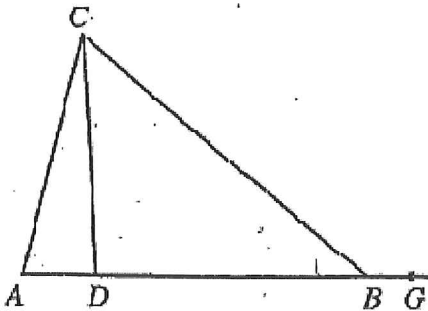
6. In the figure below, points A, C, E and G are collinear; B, C, D are collinear; and D, E, F are collinear. Angle measures are as marked and $m\angle D$ is 80° . What is the measure of $\angle EFG$?



7. Which of the following give 2 of the 3 interior angle measures of a TRIANGLE for which the 3rd angle measurement would be equal to one of the two given angles.

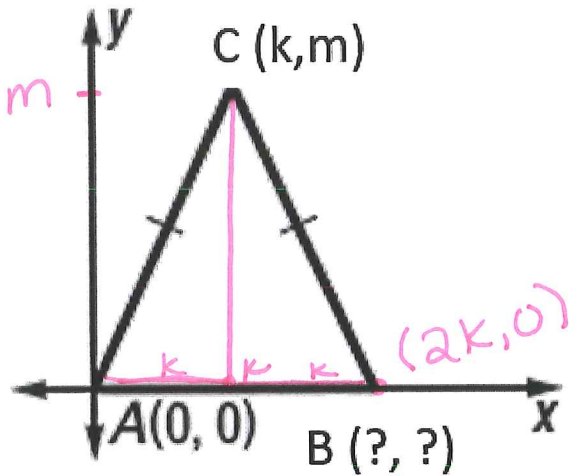
- a. 20, 20°, 40°
- b. 40, 40°, 100°
- c. 30, 30°, 6
- d. 45, 45°, 120°
- e. 50, 50°, 60°

8. In the figure, A, D, B and G are collinear. If $\angle CAD$ measures 76° , $\angle BCD$ measures 47° , and $\angle CBG$ measures 140° , what is the degree measure of $\angle ACD$?

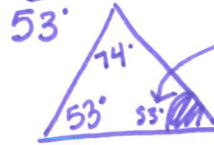


Triangle Review FAQ

1. Find the missing coordinates of each triangle.



2. Classify the triangle by its sides and angles given the two angle measure are 12° and 84° .

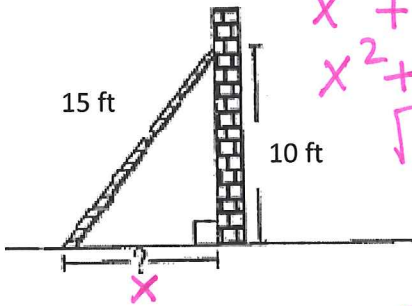


Find this angle by Δ sum theorem.
 $? + 74 + 53 = 180$
 $? = 53$

This Δ is isosceles because base \angle s of isosceles triangles are \cong

4. Find the value of x.

3. A ladder is 15ft long and reaches 10 feet up a wall, as shown in the picture. How many feet is the bottom of the base of the wall?



$$x^2 + 10^2 = 15^2$$

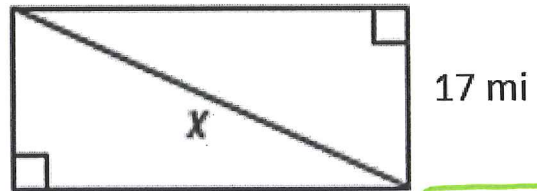
$$x^2 + 100 = 225$$

$$\sqrt{x^2} = \sqrt{125}$$

$$\sqrt{125} = 5\sqrt{5}$$

$$x = 5\sqrt{5}$$

21 mi



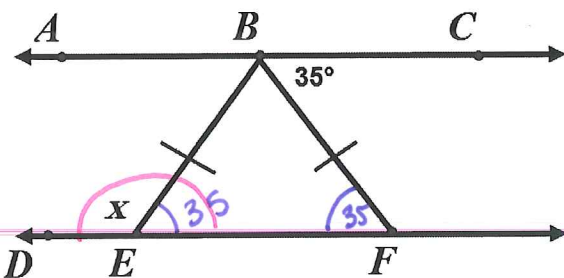
$$21^2 + 17^2 = x^2$$

$$441 + 289 = x^2$$

$$\sqrt{730} = x$$

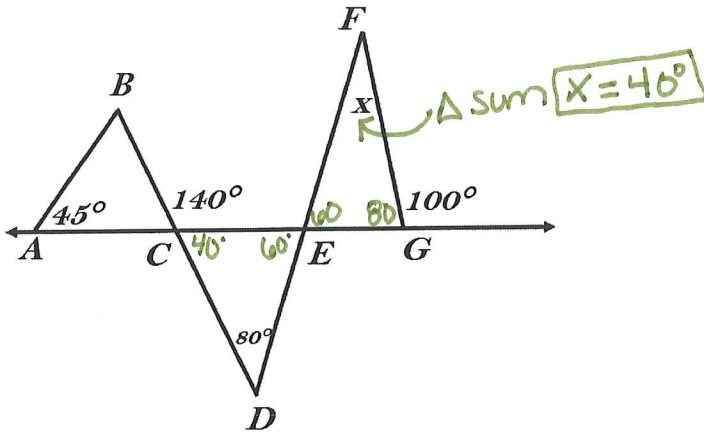
$$x = \sqrt{730}$$

5. In the figure below, B is on \overline{AC} , E is on \overline{DF} , \overline{AC} is parallel to \overline{DF} , and \overline{BE} is congruent to \overline{BF} . What is the measure of $\angle DEB$?



$x + 35 = 180$ linear pairs are suppl.
 $x = 145^\circ$

6. In the figure below, points A, C, E and G are collinear; B, C, D are collinear; and D, E, F are collinear. Angle measures are as marked and $m\angle D$ is 80° . What is the measure of $\angle EFG$?



7. Which of the following give 2 of the 3 interior angle measures of a TRIANGLE for which the 3rd angle measurement would be equal to one of the two given angles.

- a. ~~20, 20, 40~~
- b. 40, 40, 100
- c. 30, 30, 6
- d. 45, 45, 120
- e. 50, 50, 60

Handwritten calculations for problem 7:

$$20 + 20 + 40 \neq 180$$

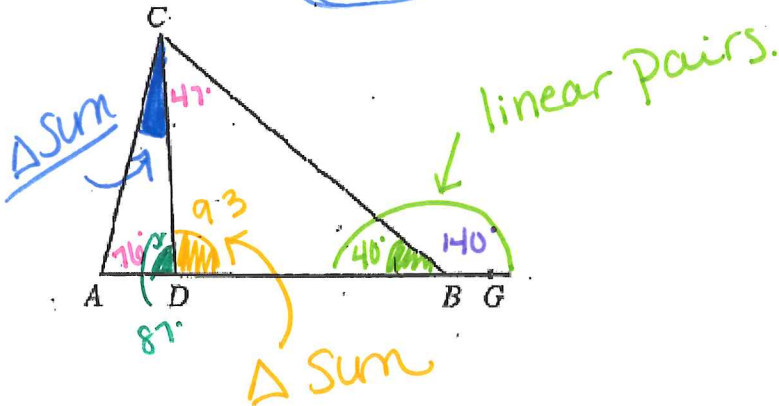
$$40 + 40 + 100 = 180 \checkmark$$

$$30 + 30 + 6 \neq 180$$

$$45 + 45 + 120 \neq 180$$

$$50 + 50 + 60 \neq 180$$

8. In the figure, A, D, B and G are collinear. If $\angle CAD$ measures 76° , $\angle BCD$ measures 47° , and $\angle CBG$ measures 140° , what is the degree measure of $\angle ACD$?



$$\angle ACD + 87 + 76 = 180$$

$$\boxed{\angle ACD = 17^\circ}$$