

Name:

Period:



**Unit 10 Practice Test**  
**Calculators OK**

Question 01.

Part 1:

Two angles of a triangle are  $50^\circ$  and  $80^\circ$ . Select **all** of the following that must be true.

- a) It is an acute triangle.
- b) It is an isosceles triangle.
- c) All side lengths are different.
- d) Two side lengths are the same.
- e) The last angle is 20 degrees.

Part 2:

Two angles of a triangle are  $20^\circ$  and  $30^\circ$ . Select **all** of the following that must be true.

- a) It is an obtuse triangle.
- b) It is a scalene triangle.
- c) All side lengths are different.
- d) Two side lengths might be the same.
- e) The last angle is 130 degrees.

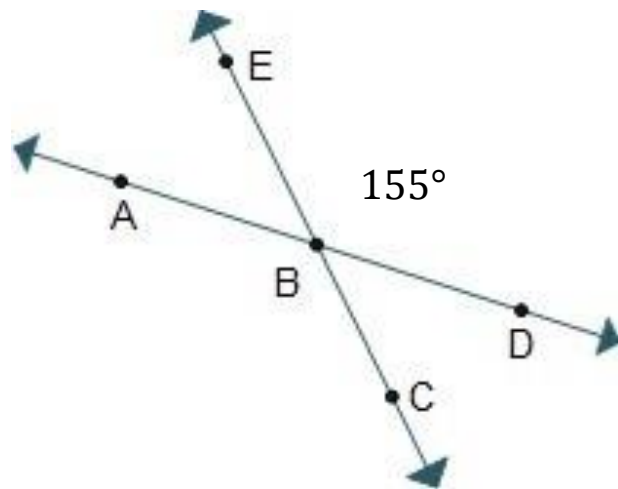
Question 02.

You are making a triangle. Your first two side lengths are 2 units and 7 units long. Select all of the following that could your final side length.

- a) 15 units long
- b) 9 units long
- c) 8 units long
- d) 7 units long
- e) 6 units long
- f) 5 units long
- g) 3 units long

Question 03.

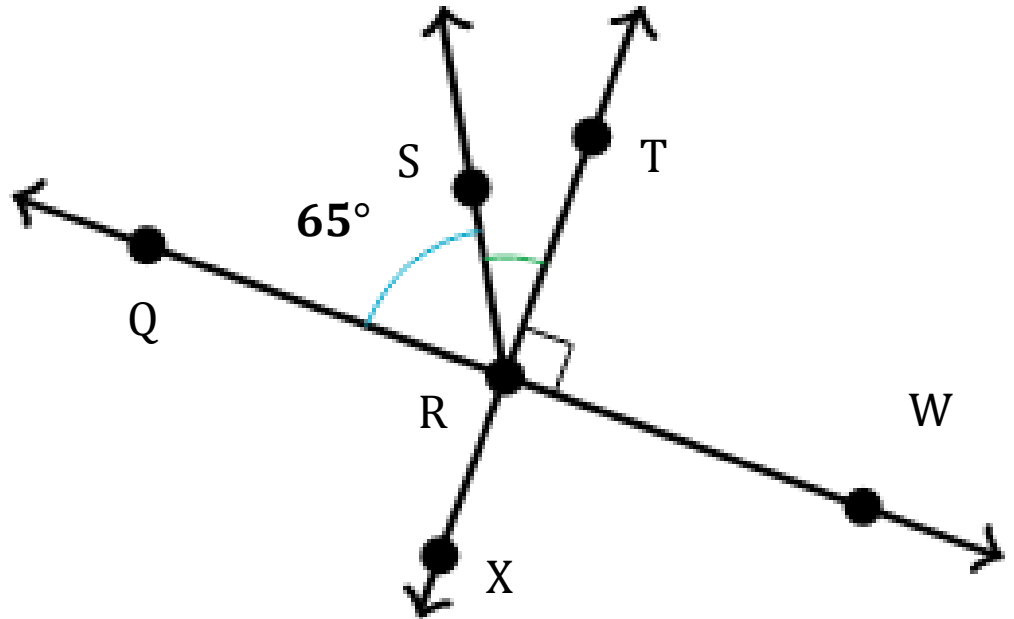
Use the figure below to answer the following questions.



1. Angle  $ABC$  is \_\_\_\_\_ degrees.
2. Angle  $EBA$  is \_\_\_\_\_ degrees.
3. Angle  $DBC$  is \_\_\_\_\_ degrees.
4. Angle  $ABC$  and Angle  $DBC$  are \_\_\_\_\_ angles. Circle: “supplementary” or “vertical”
5. Angle  $ABE$  and Angle  $DBC$  are \_\_\_\_\_ angles. Circle: “supplementary” or “vertical”

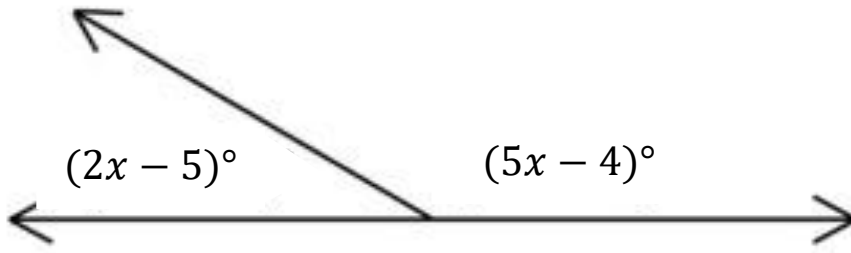
Question 04.

Use the figure below to answer the following questions.



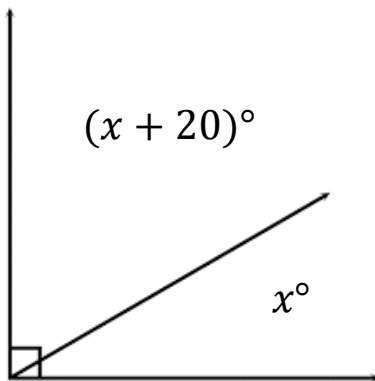
1. Angle  $SRT$  is \_\_\_\_\_ degrees.
2. Angle  $TRW$  is \_\_\_\_\_ degrees.
3. Angle  $WRX$  is \_\_\_\_\_ degrees.
4. Angle  $SRT$  + Angle  $TRW$  = \_\_\_\_\_ degrees.
5. Angle  $SRW$  is \_\_\_\_\_ degrees.
6. Angle  $XRQ$  + Angle  $QRS$  = \_\_\_\_\_ degrees.
7. Angle  $XRS$  is \_\_\_\_\_ degrees.
8. Angles  $QRS$  and  $SRT$  are \_\_\_\_\_ angles. Circle: “supplementary” or “complementary”

Question 05.



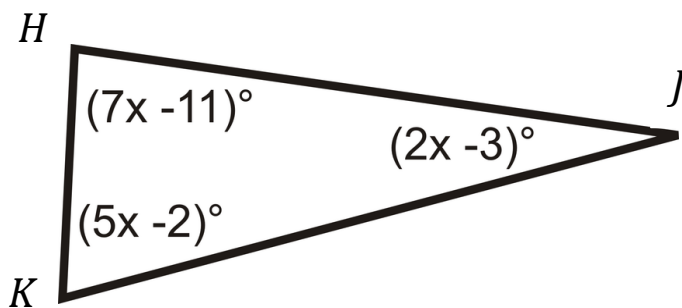
The value of  $x$  is \_\_\_\_\_

Question 06.



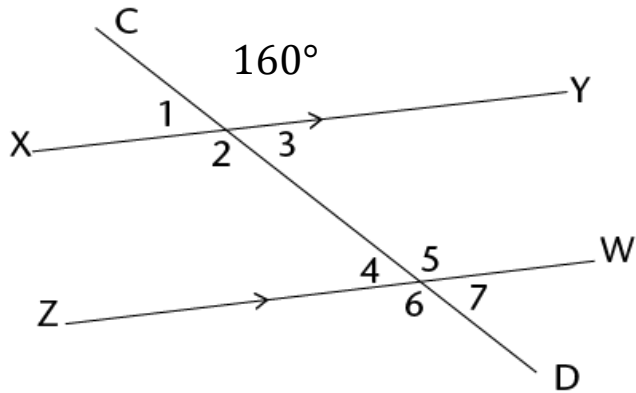
The value of  $x$  is \_\_\_\_\_

Question 07.



Angle  $HJK$  is \_\_\_\_\_ degrees.

Question 08.



a) Angle 1 is \_\_\_\_\_ degrees

b) Angle 2 is \_\_\_\_\_ degrees

c) Angle 3 is \_\_\_\_\_ degrees

d) Angle 4 is \_\_\_\_\_ degrees

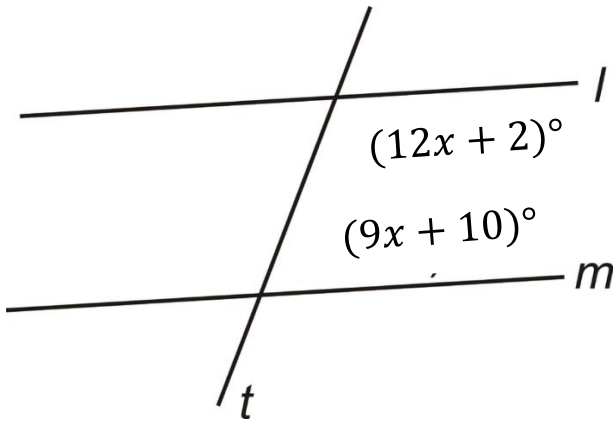
e) Angle 5 is \_\_\_\_\_ degrees

f) Angle 6 is \_\_\_\_\_ degrees

g) Angle 7 is \_\_\_\_\_ degrees

Question 09.

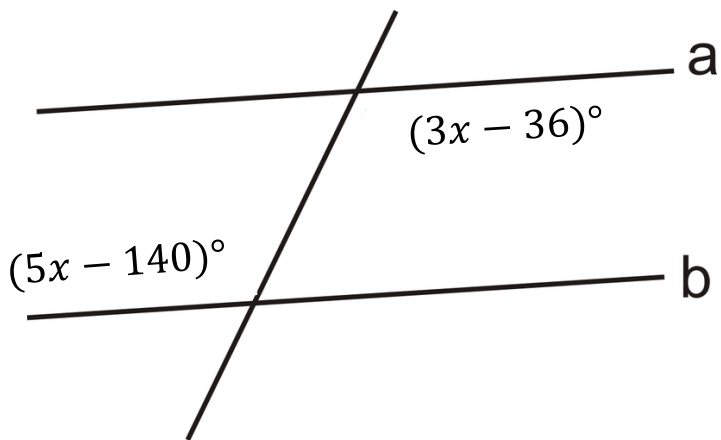
Below, line  $l$  is parallel to line  $m$ .



The value of  $x$  is \_\_\_\_\_

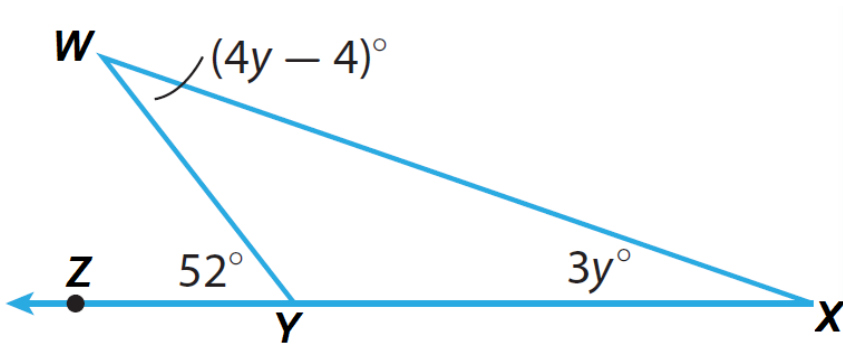
Question 10.

Below, line  $a$  is parallel to line  $b$ .



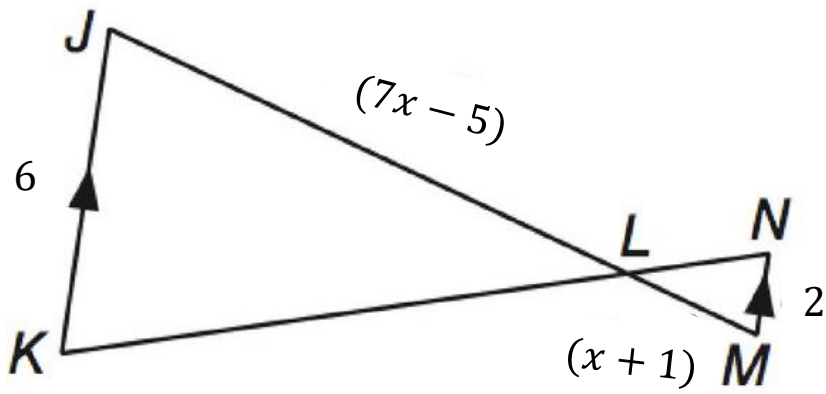
The value of  $x$  is \_\_\_\_\_

Question 11.



The value of  $y$  is \_\_\_\_\_

Question 12.



The value of  $x$  is \_\_\_\_\_

## BONUS

In the figure below,  $ABCD$  is a square and  $AEB$  is an equilateral triangle.

Angle  $ACE$  is \_\_\_\_\_ degrees. *Show your work!*

