

TEST NAME: **Angles and Triangles Review**  
TEST ID: **829855**  
GRADE: **07 - Seventh Grade**  
SUBJECT: **Mathematics**  
TEST CATEGORY: **School Assessment**

## 01/21/16, Angles and Triangles Review

Student: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

1. One side of a triangle measures 10 inches. Which could be the measures of the other two sides of the triangle?
  - A. 3 inches and 8 inches
  - B. 4 inches and 6 inches
  - C. 5 inches and 15 inches
  - D. 6 inches and 18 inches
  
2. A scalene triangle has two sides that measure 6 cm and 14 cm. Which could be the length of the third side of the triangle?
  - A. 8 cm
  - B. 10 cm
  - C. 14 cm
  - D. 20 cm
  
3. Which set of angle measures could be the interior angles of a triangle?
  - A.  $25^\circ$ ,  $30^\circ$ ,  $35^\circ$
  - B.  $35^\circ$ ,  $60^\circ$ ,  $75^\circ$
  - C.  $45^\circ$ ,  $60^\circ$ ,  $75^\circ$
  - D.  $60^\circ$ ,  $90^\circ$ ,  $120^\circ$
  
4. For triangle  $JKL$ , side  $JK$  measures 9 cm and side  $KL$  measures 15 cm. Which statement is true for all the possible lengths of side  $JL$ ?
  - A. The length of side  $JL$  is greater than or equal to 6 cm and less than or equal to 24 cm.
  - B. The length of side  $JL$  is greater than or equal to 9 cm and less than or equal to 15 cm.
  - C. The length of side  $JL$  is greater than 6 cm and less than 24 cm.
  - D. The length of side  $JL$  is greater than 9 cm and less than 15 cm.

5. A triangle has two angles that measure  $47^\circ$  and  $67^\circ$ . What is the measure of the third angle in this triangle?
- A.  $114^\circ$
  - B.  $66^\circ$
  - C.  $46^\circ$
  - D.  $20^\circ$
6. A triangle has two angles that measure  $40^\circ$  and  $100^\circ$ . What type of triangle is this?
- A. scalene
  - B. isosceles
  - C. equilateral
7. Amanda is using colored sticks to make a triangle for a class project. Each colored stick has a different measurement as shown in the table below.

Stick Color	Length of Each Stick (inches)
Red	2
Blue	3
Yellow	4
Green	6
Brown	8

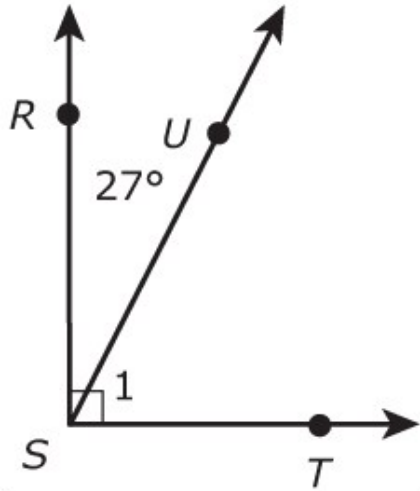
Which combination of sticks could be used to create a triangle?

- A. two red sticks and one yellow stick
- B. two blue sticks and one brown stick
- C. one red stick, one blue stick, and one green stick
- D. one blue stick, one yellow stick, and one green stick

8. Two angles are supplementary. The measure of one angle is 4 times the measure of the other angle. What is the measure of the smaller angle?

- A.  $144^\circ$
- B.  $80^\circ$
- C.  $72^\circ$
- D.  $36^\circ$

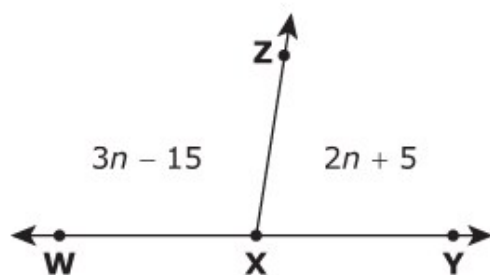
9. Angle  $RST$  is a right angle.



What is the measure of  $\angle UST$ ?

- A.  $27^\circ$
- B.  $36^\circ$
- C.  $63^\circ$
- D.  $81^\circ$

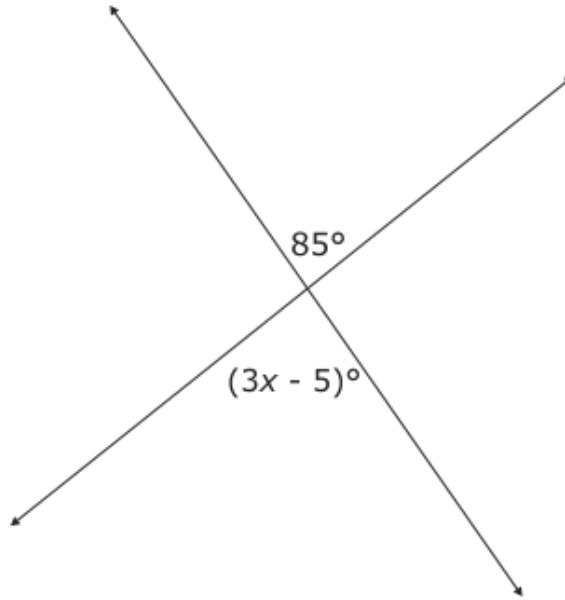
10. In the figure below,  $\overrightarrow{XZ}$  extends from  $\overrightarrow{WY}$ .



What is  $m\angle YXZ$ ?

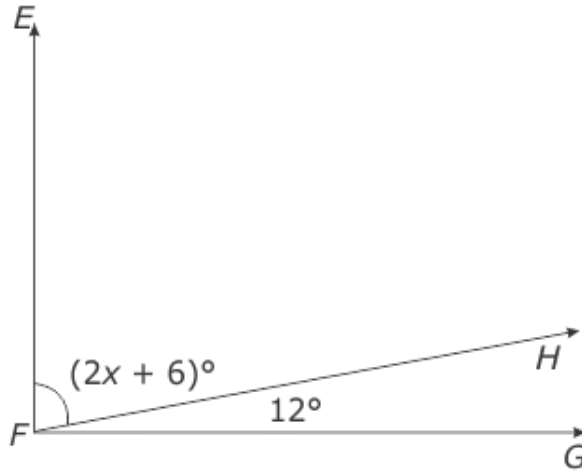
- A.  $45^\circ$
- B.  $81^\circ$
- C.  $87^\circ$
- D.  $99^\circ$

11. What is the value of  $x$  in the figure below?



- A. 27
- B. 30
- C. 32
- D. 95

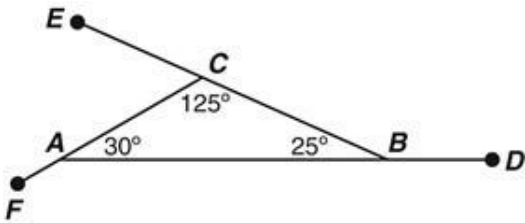
12. In the image below,  $\angle EFG$  is a right angle.



What is the value of  $x$ ?

- A. 78
- B. 72
- C. 42
- D. 36

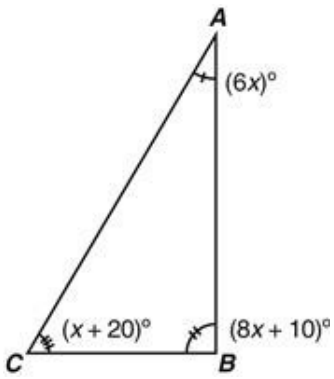
13. Triangle  $ABC$  has angles that measure  $30^\circ$ ,  $25^\circ$ , and  $125^\circ$ , as shown below.



What is the sum of the measures of the three exterior angles,  $\angle BAF$ ,  $\angle DBC$ , and  $\angle ECA$ ?

- A.  $180^\circ$
- B.  $270^\circ$
- C.  $360^\circ$
- D.  $450^\circ$

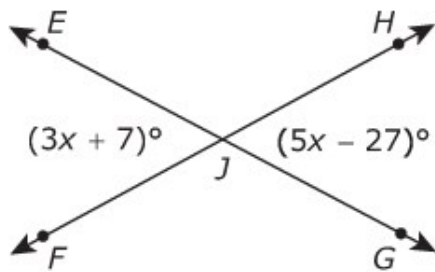
14. Triangle  $ABC$  is shown.



What value of  $x$  will prove that Triangle  $ABC$  is a right triangle?

- A. 10
- B. 15
- C. 70
- D. 90

15. In this figure, line  $EG$  intersects line  $FH$  at point  $J$ .

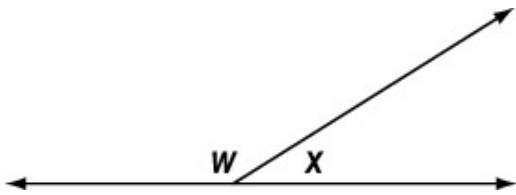


What is the measure of  $\angle EJF$ ?

- A.  $17^\circ$
- B.  $37^\circ$
- C.  $58^\circ$
- D.  $82^\circ$



16. In the diagram below, the measure of  $\angle W$  is 5 times as large as the measure of  $\angle X$ .



What is the measure of angle  $\angle W$ ?

- A.  $60^\circ$
- B.  $120^\circ$
- C.  $144^\circ$
- D.  $150^\circ$