1

Are the triangles congruent?
If so, why?

A) Yes, AAS   Ms. Duffy was in the cafeteria
B) No   Ms. Fischer was in Mr. Crayton's office
C) Yes, SAS   Mrs. Hammond was in the media center
D) Yes, SSS   Mrs. Woolley was at Bojangles
E) Yes, AAA   Mr. Taylor was on the basketball courts.

2
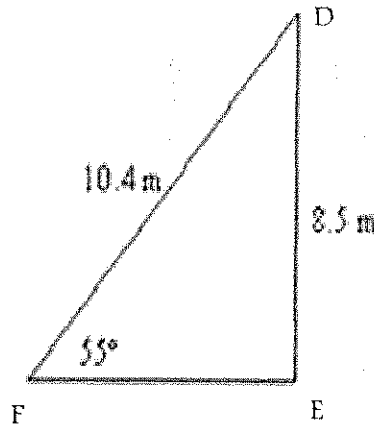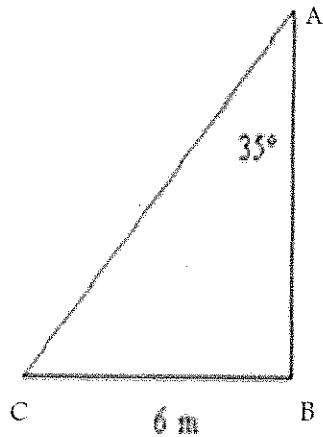
Given ΔABC is congruent to ΔDEF, find m<E and AC.

A)   m<E = 35; AC = 10.4   The weapon was not an algebra book
B)   m<E = 90; AC = 10.4   The weapon was not a pen
C)   m<E = 90; AC = 8.5   The weapon was not a calculator
D)   m<E = 100; AC = 10.4   The weapon was not a protractor
E)   m<E = 85; AC = 8.5   The weapon was not cafeteria food

3
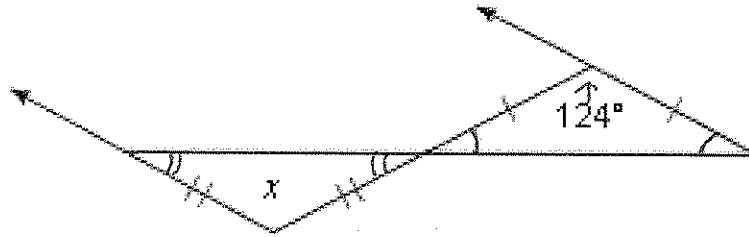
Find the value of x.

A) 56 °   Mrs. Woolley was in the cafeteria

B) 112 °   Ms. Duffy was in Mr. Crayton's office

C) 159 °   Mr. Wolfe was in the media center

D) 148 °   Ms. Fischer was in student services

E) 124°   Ms. Plant was in Mr. Crayton's office

4
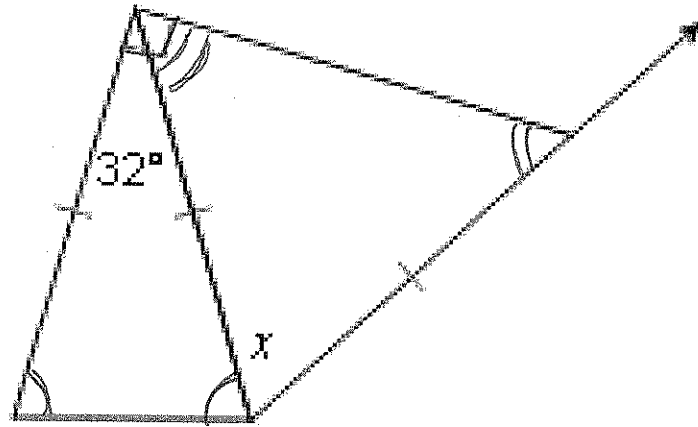
Find the value of x.

$32°$

x

The weapon is NOT....

A) 77 °   an algebra book

B) 64 °   a calculator

C) 63 °   cafeteria food

D) 51 °   protractor

E) 148°   compass

5

Find FG.

A) 8   Ms. Fischer was in student services

B) 3   Ms. Duffy was in the cafeteria

C) 24   Mrs. Hammond was in the media center

D) 9   Mrs. Woolley was at Bojangles

E) 16   Mr. Taylor was in Mr. Crayton's office

6
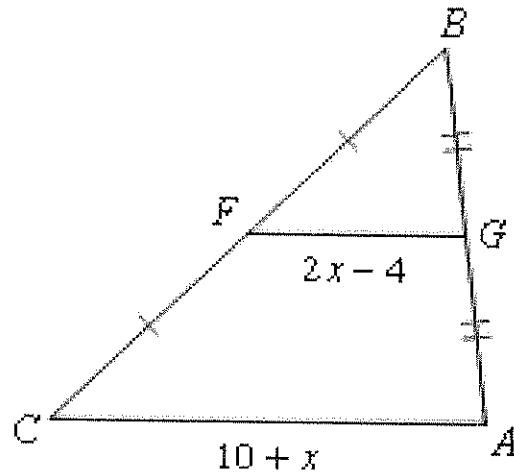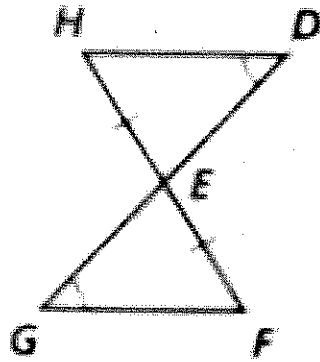
Are the triangles congruent? If so, why?

A) Yes, ASA The weapon was not a compass
B) Yes, AAS The weapon was not cafeteria food
C) No   The weapon was not a calculator
D) Yes, SSA The weapon was not a pen
E) Yes, SAS The weapon was not a protractor

7
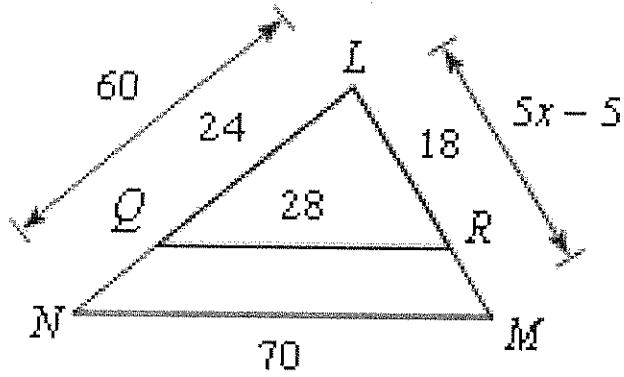
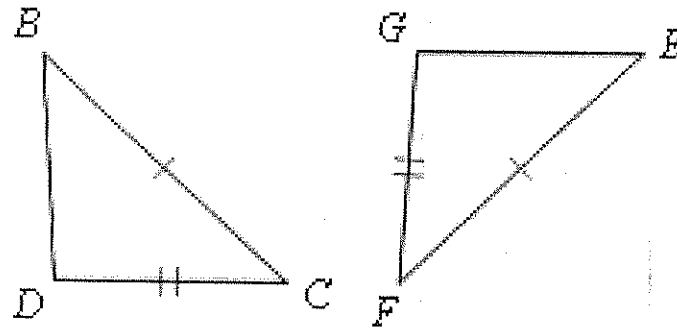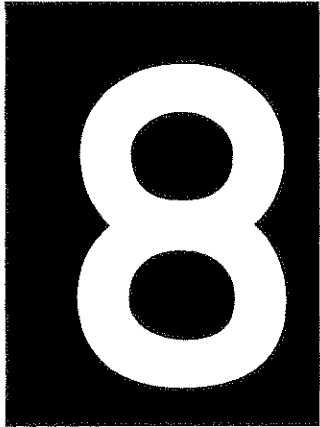Given the triangles are similar, solve for x.

A) 8   Ms. Plant was in Mr. Crayton's office.

B) 3   Ms. Fischer was at Bojangles

C) 24   Ms. Duffy was on the basketball courts.

D) 9   Mrs. Hammond was in the cafeteria

E) 10   Mr. Taylor was at Bojangles

8

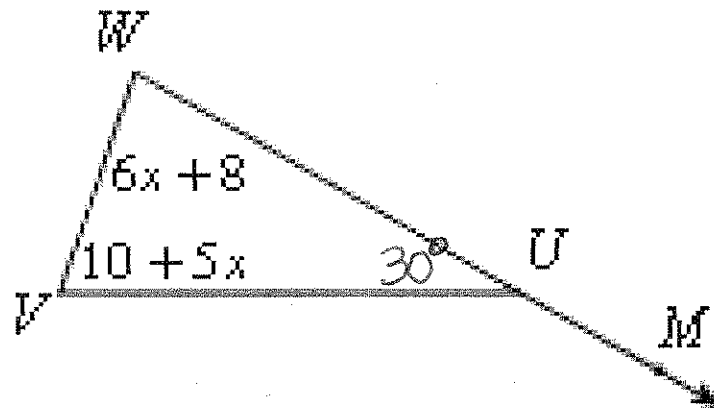What additional information is needed to prove the triangles are congruent by SAS?

The weapon is NOT....

A) <B ≅ <E   an algebra book

B) BD = GE   a calculator

C) <D ≅ <G   cafeteria food

D) <C ≅ <F   protractor

E) BD = FE   compass

9

Find the measure of angle V.

A) 87°   Ms. Duffy was in the library
B) 80 ° Ms. Hammond was in the cafeteria
C) 57 ° Mrs. Woolley was in student services
D) 67 ° Mr. Taylor was in Mr. Crayton's office
E) 70 ° Mr. Wolfe was on the basketball courts

10

Elizabeth's eyes are 150 cm from the floor. She places a mirror on the floor 18 m from the base of a climbing wall. She walks backward 120 cm, until she sees the top of the wall in the mirror. What is the height of the climbing wall?
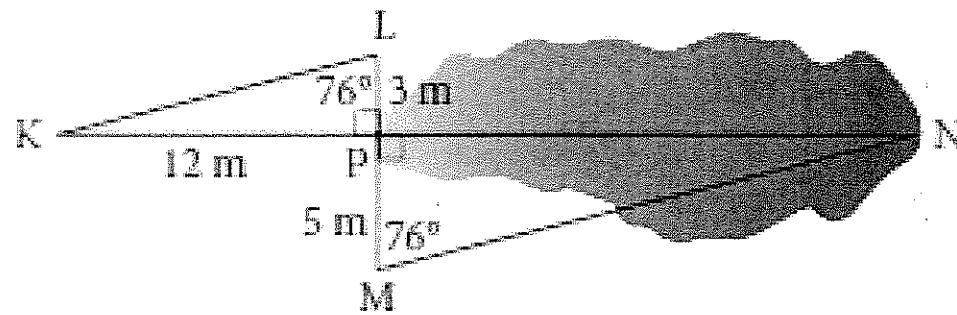
(Hint: statue problem #1 on Notes)

The weapon was NOT...

A) 2550 cm or 25.5m   a calculator.

B) 1250 cm or 12.5m   a pen.

C) 2000 cm or 20m   an algebra book.

D) 1800 cm or 18m   a protractor.

E) 2250 cm or 22.5m   a compass.

11

To find the length of a pond, a surveyor took some measurements. She recorded them on this diagram. What is the length of the pond?

A) 11.25m Mr. Taylor was coaching a game

B) 15m Ms. Duffy was vacationing in Florida

C) 20m Mrs. Woolley was out sick

D) 1.25m Ms. Fischer was in jury duty

E) 10.25m Ms. Plant was in the hospital