# MEMORIES FROM BOOT CAMPS
## 1,2,3

## 1) CIRCLE ALWAYS TRUE, SOMETIMES TRUE OR NEVER TRUE:

Determine if each of these statements is always true, sometimes true, or never true. Circle your response.

1. The sum of the measures of two complementary angles is 90°.

    Always True          Sometimes True          Never True

2. Vertical angles are also adjacent angles.

    Always True          Sometimes True          Never True

3. Two adjacent angles are complementary.

    Always True          Sometimes True          Never True

4. If the measure of an angle is represented by $x$, then the measure of its supplement is represented by $180 - x$.

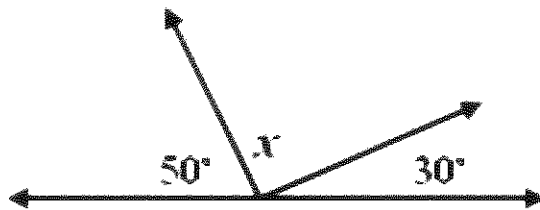    Always True          Sometimes True          Never True

5. If two lines intersect, each pair of vertical angles are supplementary.

    Always True          Sometimes True          Never True

## 2) FIND THE VALUE OF X.



50°   x   30°

## 3) FIND THE AREA IN WHICH SHAYNE IS ALLOWED TO DIG.

A utility line runs underground through Shayne's rectangular backyard. Shayne is not allowed to dig within 3 feet of the utility line. The diagram below shows the dimensions of Shayne's backyard in feet. The dashed line represents the utility line.
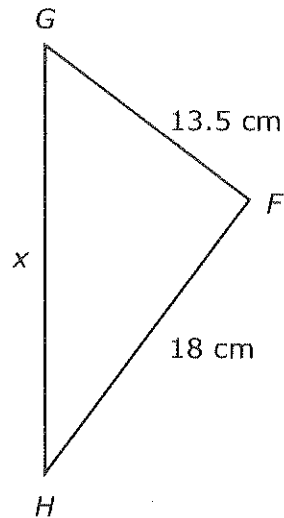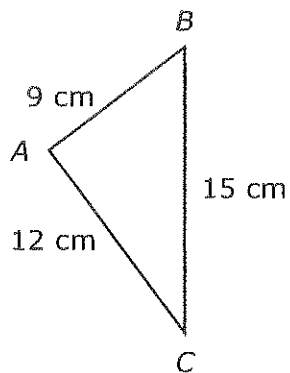


22 ft

No digging    No digging

17 ft

3 ft    3 ft    14 ft
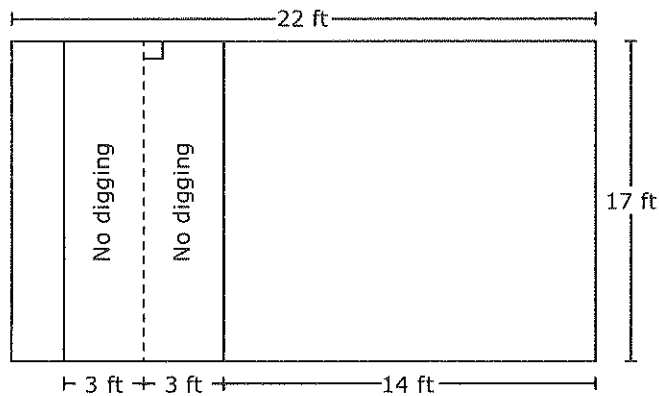
What is the area in square feet of the part of the backyard in which Shayne is allowed to dig?

F   272 ft$^2$

G   374 ft$^2$

H   102 ft$^2$

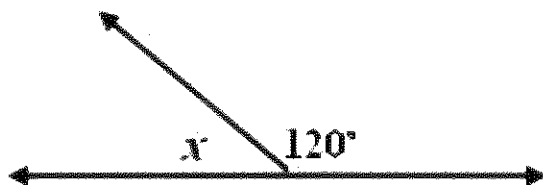J   59 ft$^2$

## 4) WHAT IS THE VALUE OF X?

Triangle *ABC* is similar to triangle *FGH*.



What is the value of *x* in centimeters?

**F** 22.5 cm

**G** 8 cm

**H** 10.8 cm

**J** 30 cm

## 5) FIND X.

# 6) ANSWER THE QUESTION.

Angles F and G are complementary angles. Angles G and H are supplementary angles. The degree measure of each angle is a whole number. What is the smallest possible measure of angle H?
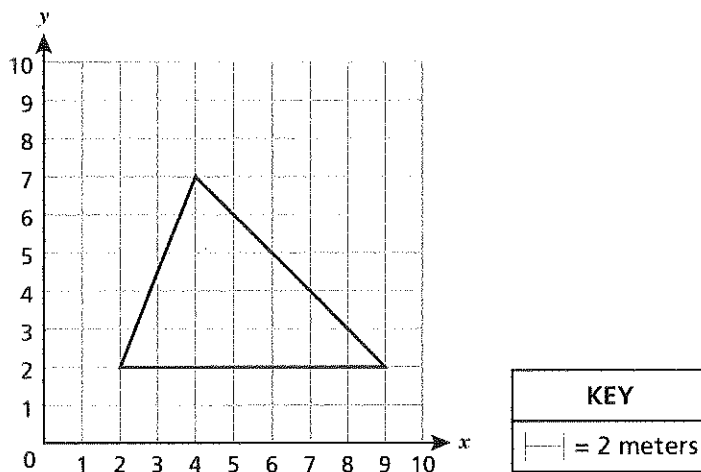
A. 1°

B. 89°

C. 91°

D. 179°

# 7) ANSWER THE QUESTION.

The lengths of two sides of a triangle are 20 mm and 13 mm. Which of these lengths cannot represent the length of the third side. There can be more than one answer.

1. 35 mm
2. 10 cm
3. 20 mm
4. 45 mm

# 8) FIND THE AREA.

The scale drawing of a field in the shape of a triangle is shown below.



What is the actual area, in square meters, of this field?

A  8.75

B  17.5

C  35

D  70