

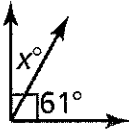
Name: SAMPLE

Date: _____

7th Grade RED CHAPTER 7 Practice 2

State whether the angles are adjacent or vertical. Then find the value of x. (2pts)

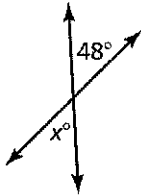
1)



$$\begin{array}{r}
 x + 61 = 90 \\
 - 61 \quad | - 61 \\
 \hline
 x = 29^\circ
 \end{array}$$

Answer: ADJACENT or VERTICAL
 X = 29°

2)



Answer: ADJACENT or VERTICAL
 X = 48°

Solve.

3) The measure of two supplementary angles have a ratio of $\frac{1}{17}$. What is the measure of the larger one?

180°

$$\begin{array}{r}
 10 \leftarrow 1 \text{ part} \\
 18 \overline{) 180} \\
 \underline{180} \\
 0
 \end{array}$$

$18 \downarrow$ parts

$$10 \times 17 = 170^\circ$$

Larger Angle = 170°

Tell whether the angles are complementary, supplementary or neither.

5)



Supplementary

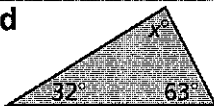
6)



complementary

Find the value of x. Classify the triangle.

6)



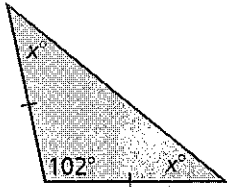
$$\begin{array}{r}
 63 \\
 + 32 \\
 \hline
 95 \\
 180 - 95 = 85
 \end{array}$$

X = 85°

Classification:
acute scalene

Find the value of x. Classify the triangle.

7)



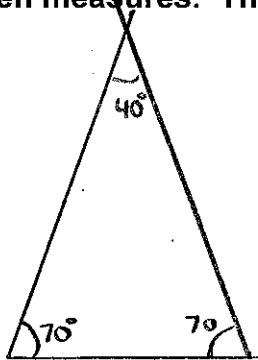
$$\begin{array}{r} 180 \\ - 102 \\ \hline 78 \end{array} \div 2 = 39^\circ$$

x = 39°

Classification:
obtuse isosceles

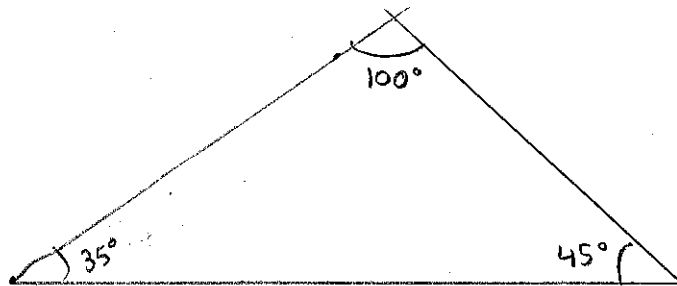
Draw a triangle with the given measures. Then classify.

8) ~~40~~ 40°, 70°, 70°



Classification:
acute isosceles

9) 35°, 45°, 100°



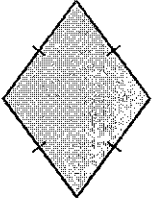
Classification:
obtuse scalene

10) Name two quadrilaterals that have four 90° angles.

square and rectangle

Classify the quadrilateral.

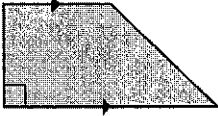
11)



Classification:

rhombus

12)

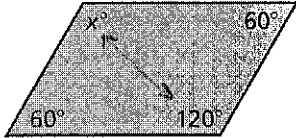


Classification:

trapezoid

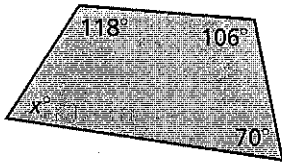
Find the value of x.

13)



13) $x = \underline{120^\circ}$

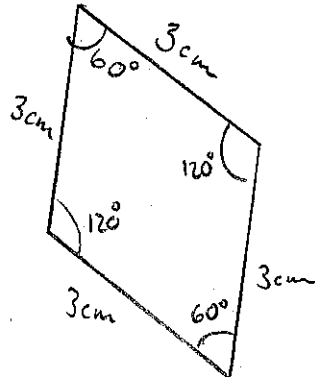
14)



14) $x = \underline{66^\circ}$

Draw a rhombus with two 60° angles.

15)



Find the missing dimension. Use a scale factor of 1 : 15.

16)

Item	Model	Actual
Tree	Height: ? ft	Height: 30 ft
Door	Height: 10 in.	Height: ? in.

$$\frac{x}{30} = \frac{1}{15} \quad \cdot \frac{10}{x} = \frac{1}{15}$$

16) $\frac{2 \text{ ft}}{150 \text{ in.}}$

17) A basketball player is 6 feet 8 inches tall. A model of the basketball player is 5 inches tall. What is the scale factor? ← has to be same units

$$6 \text{ ft } 8 \text{ in} = 80 \text{ in}$$

$$\frac{80 \text{ in}}{5 \text{ in}} = \frac{16 \text{ in}}{1 \text{ in}}$$

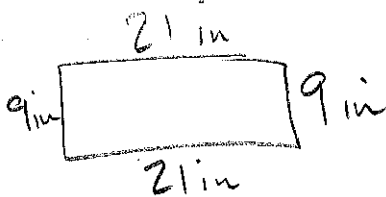
17) $1 : 16$

18) A scale drawing of a movie screen is 21 inches long and 9 inches tall. The actual screen is 30 feet tall.

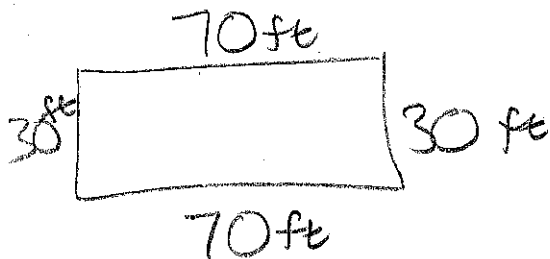
- What is the scale of the drawing?
- Find the perimeter and area of the scale drawing.
- Find the perimeter and area of the actual movie screen.

$$\frac{21 \text{ in}}{9 \text{ in}} = \frac{70 \text{ ft}}{30 \text{ ft}} \div 3 \text{ SCALE get to simplest form}$$

$$\div 3 \left(\frac{3 \text{ in}}{10 \text{ ft}} \right)$$



Scale: $3 \text{ in} : 10 \text{ ft}$



MODEL
Perimeter: 60 in.

Area: 189 in^2

ACTUAL MOVIE SCREEN
Perimeter: 200 ft

Area: 2100 ft^2