MATH 104/GRACEY
WORKSHEET/1.1, 1.2

Name_____

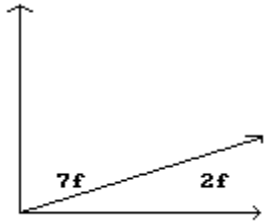
Solve the problem.

1) Find the complement of an angle whose measure is 47°.

2) Find the supplement of an angle whose measure is 28°.

Find the measure of each angle in the problem.

3)



4) Supplementary angles with measures 3p + 1 and 2p + 4 degrees

Perform the calculation.

5) 124°37′ + 340°34′

6) 90° – 5°14′

7) 71°21′ – 11°46′

Convert the angle to decimal degrees and round to the nearest hundredth of a degree.

8) 56°54′8″

9) 300°8′4″

Convert the angle to degrees, minutes, and seconds.

10) 79.02°

11) 59.18°

Find the angle of smallest possible positive measure coterminal with the given angle.

12) –197°

13) 567°

14) 871°

15) 1318°

16) –31°

Draw the given angle in standard position. Draw an arrow representing the correct amount of rotation. Find the measure of two other angles, one positive and one negative, coterminal with the given angle.

17) 50°

18) 295°

19) –85°

Solve the problem.

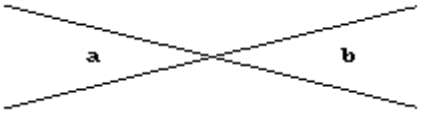
20) Find the measure of the smaller angle formed by the hands of the clock shown.

21) A wheel makes 186 revolutions per minute. How many revolutions does it make per second?

22) A wheel is rotating 1200 times per minute. Through how many degrees does a point on the edge of the wheel move in $\frac{1}{4}$ seconds?

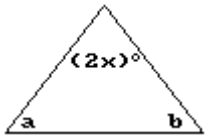
Use the properties of angle measures to find the measure of each marked angle.

23) Find the measure of the marked angles.



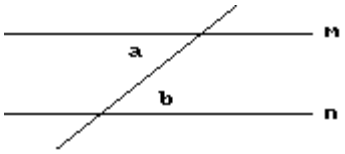
a = (4x + 6)°
b = (3x + 24)°

24) Find the measure of the marked angles.



a = (x + 18)°
b = (x + 106)°

25) Find the measure of the marked angles.
Lines m and n are parallel.



a = (5x + 9)°
b = (4x + 16)°

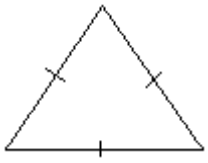
Find the measure of the third angle of a triangle if the measures of the other two angles are given.

26) 50° and 90°

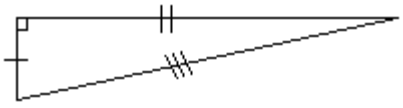
27) 20.3° and 80.1°

Classify the triangle as acute, right, or obtuse and classify it as equilateral, isosceles, or scalene.

28)

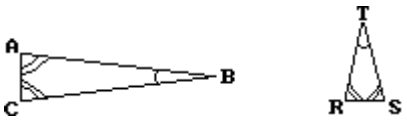


29)

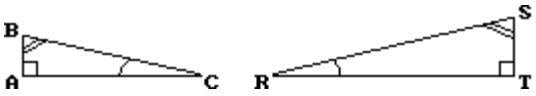


The triangles are similar. Find the angle or side that corresponds to the given angle or side in the other triangle.

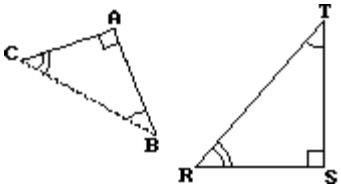
30) B



31) C

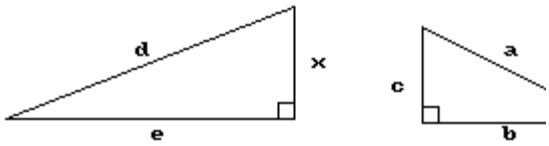


32) AC



The triangles are similar. Find the missing side, angle or value of the variable.

33)



a = 41
b = 40
c = 9
d = 82
e = 80

Solve the problem. Round answers to the nearest tenth if necessary.

34) A tree casts a shadow 18 m long. At the same time, the shadow cast by a 64–centimeter–tall statue is 65 cm long. Find the height of the tree.