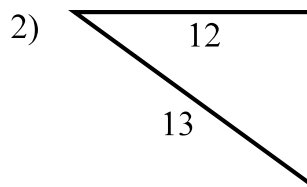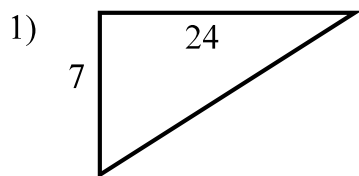# Geometry Review
Algebra 2

Use the Pythagorean Theorem to find the missing lengths. Put answers in simplest form.

1)

24
7

2)

12
13

3) a = 13, b = ?, c = 85   4) a = ?, b = 7, c = 9   5) a = 5, b = ?, c = 11   6) a = 3, b = 5, c = ?

Use the information given in each problem below and the figure at the right to answer each question.
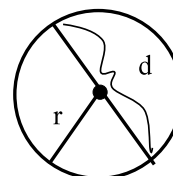
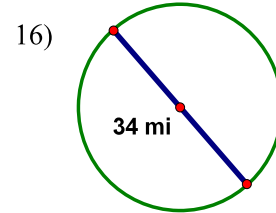7)   r = 8 in. Find d.   8) r = 15 yds. Find d.   9) r = 32 m. Find d.

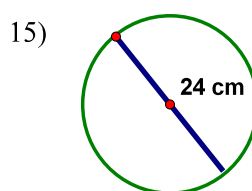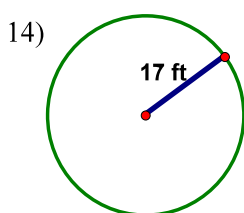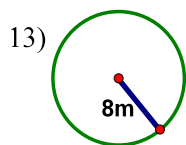
10) d = 26 cm. Find r.   11) d = 14 ft. Find r.   12) d = 49 km. Find r.

Find the circumference of each circle below in terms of pi and to the nearest tenth.

13)

8m

14)

17 ft

15)

24 cm

16)

34 mi

17) r = 5 mm   18) r = 19 km   19) d = 46 ft   20) d = 13 in

Given the circumference of a circle find the radius and diameter to the nearest tenth.
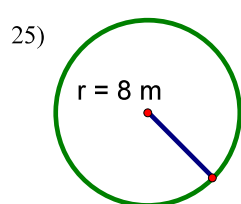
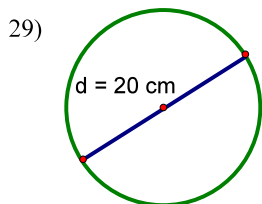21) c = 64π cm   22) c = 222π mm   23) c = 136 mi   24) c = 541 m

Find the area of each circle below in terms of pi and to the nearest tenth.

26) r = 5 in   27) r = 25 mm   28) r = 61 ft

25)

r = 8 m

29)

d = 20 cm

30) d = 12 yds

Use the table of information at the right to answer the following questions by giving a ratio in lowest terms.

31) Honda to Dodge?

32) Toyota to Nissan?

33) Geo to Chevrolet?

34) Chevrolet to Ford?

35) Mercedes to Toyota?

36) Ford to Honda?

A group of students counted the types of cars in the parking lot and found the following distribution:

Chevrolet:	65
Dodge:	84
Geo:	15
Ford:	72
Honda:	48
Mercedes:	3
Nissan:	30
Toyota:	42

Use two different methods to show whether the following ratios are proportional or not.

37) $\frac{5}{3}$ and $\frac{15}{9}$

38) $\frac{12}{20}$ and $\frac{2}{5}$

39) $\frac{51}{17}$ and $\frac{12}{4}$

40) $\frac{27}{54}$ and $\frac{13}{26}$

Solve each proportion for the missing value.

41) $\frac{8}{6} = \frac{x}{15}$

42) $\frac{a}{4} = \frac{35}{20}$

43) $\frac{12}{5} = \frac{72}{k}$

44) $\frac{9}{v} = \frac{63}{42}$

In a university music class there are 3 brass musicians for every 5 that play the strings.

45) If there are 12 brass musicians in the class, how many musicians play the strings?

46) If there are 40 that play the strings, how many brass are there?

47) What is the smallest possible number of total brass and string players in the class?

48) If the ratio of brass and string musicians in the class compared to all others is 5 to 7, and there are 35 brass and string musicians in class, how many students are enrolled in the class?

49) The ratio of brass to string is 3:5. The ratio of brass and string to all others is 2 to 3. If there are 6 brass players, how many people are in the class?