How many lines are defined by the given points?

1) $\qquad$ 2) $\qquad$ 3)
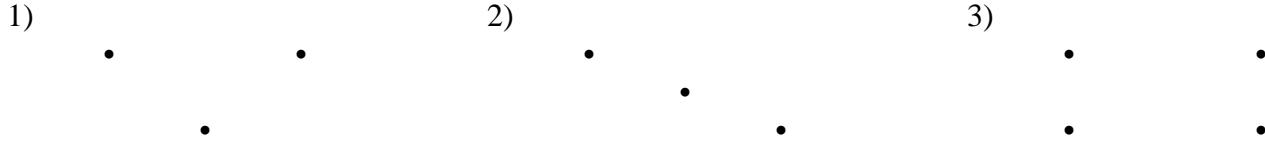
Find the indicated length in numbers 4-7.

4) Find AC.

A   4.7cm   B   12.6cm   C

5) DF = 32.2 miles. Find DE.

D   E 14.9 miles   F

6) GK = 9m. Find HK.
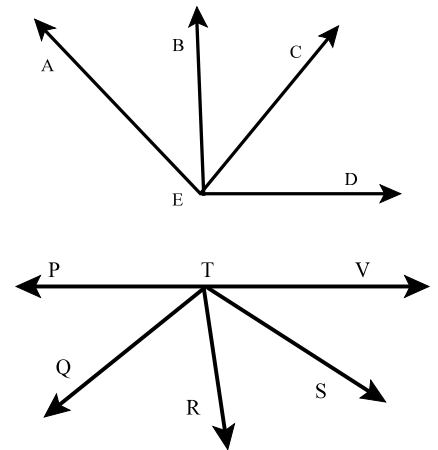
G
3.2m   H
K
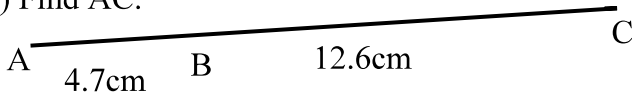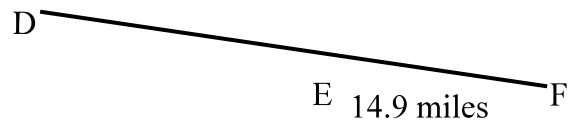
7) Find MP.
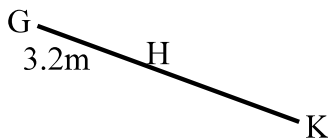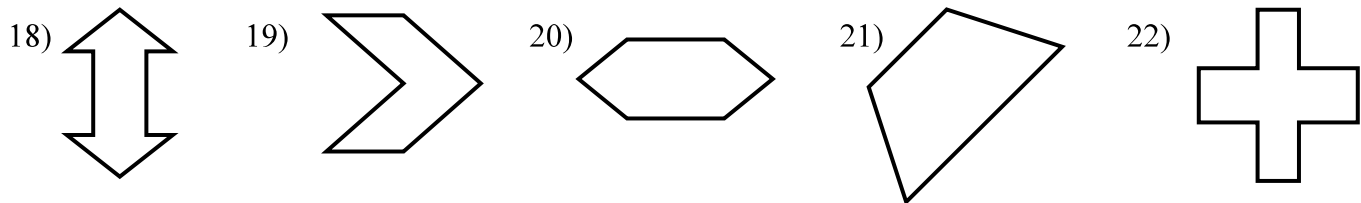
M   236 feet   N   198 feet   P
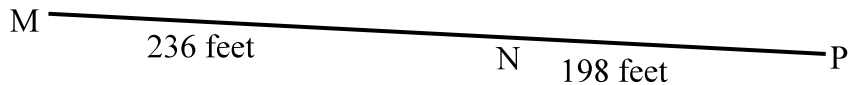
Use the figures at the right to find the angle whose measure is the sum or difference of the measures of the given angles.

8) m∠AEB + m∠BEC =
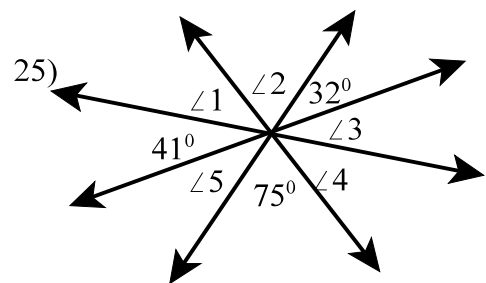
9) m∠AEC + m∠CED =

10) m∠QTR + m∠RTS =

11) m∠RTS + m∠STV =

12) m∠AED – m∠BED =

13) m∠QTP + m∠QTS =

14) m∠PTS – m∠PTQ =

15) m∠QTS + m∠STV =

16) m∠AEC – m∠AEB =

17) m∠RTV - m∠RTS =

Identify the following polygons by the number of sides and as concave or convex.

18)   19)   20)   21)   22)

Find the measures of the missing angles.

23)   ∠1 78° ∠2 ∠3 47° ∠4

24)   ∠1 62° ∠2 ∠4 ∠3 28°

25)   ∠1 ∠2 32° ∠3 41° ∠5 75° ∠4
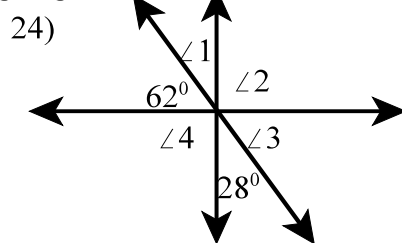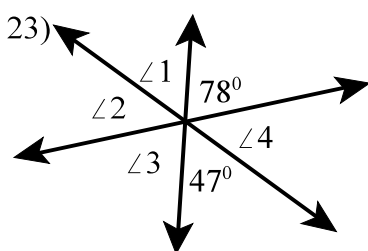
Using the information about the triangle to the right with sides a, b, c, find the missing length.

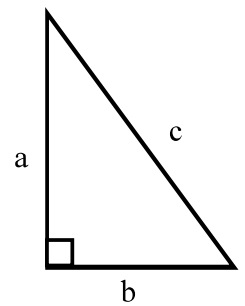26) a = 11, b = 60, c = ?   27) a = ?, b = 24, c = 26

28) a = 10, b = ?, c = 12   29) a = 4, b = 12, c = ?

Will a triangle with sides of the given lengths be a right triangle? If not, is the triangle acute or obtuse?

30) 85, 77, and 36   31) 32, 54, and 62   32) 39, 80, and 89

Use the figures at the right to find the indicated arc measure.

33) $m \overset{\frown}{AB}$ 34) $m \overset{\frown}{EH}$ 35) $m \overset{\frown}{AD}$

36) $m \overset{\frown}{HFE}$ 37) $m \overset{\frown}{DBA}$ 38) $m \overset{\frown}{HE}$

39) $m \overset{\frown}{ADB}$ 40) $m \overset{\frown}{FHE}$
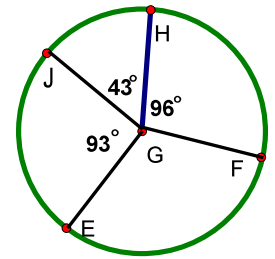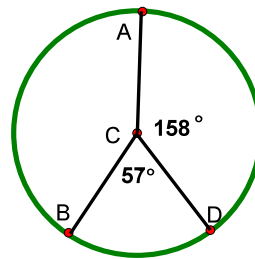
Find the circumference of the circle in each problem below in terms of pi and to the nearest tenth.

41) r = 13 mm   42) r = 22 km   43) d = 52 ft   44) d = 29 in

Given the circumference of a circle, find its' radius and diameter to the nearest tenth.

45) c = 36π m   46) c = 28π yds   47) c = 50 ft   48) c = 248 cm

Given the measure of an arc, name its' central and inscribed angles and give their measures.

49)   50)   51)   52)

Arc CD = 114°   Arc PR = 106°   Arc LM = 32°   Arc EF = 29°