

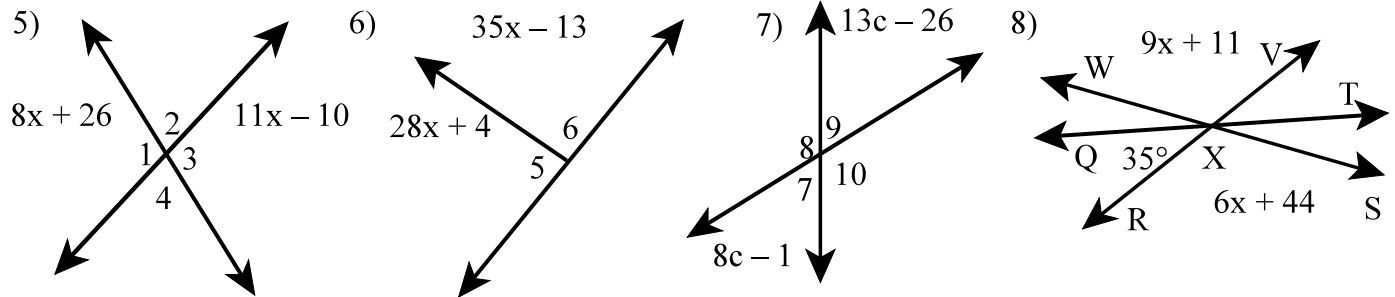
Geometry Development 5.2

Geometry

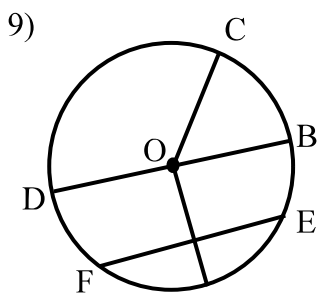
During a movie Colin reaches into a bag of M&Ms and takes a single M&M. The bag of M&Ms contains 20 reds, 16 greens, 26 browns, and 34 yellows. Give the answer as a fraction, a decimal, and a percentage.

- 1) What is the probability the M&M is red?
- 2) What is the probability the M&M is brown?
- 3) What is the probability the M&M is yellow?
- 4) What is the probability the M&M is green?

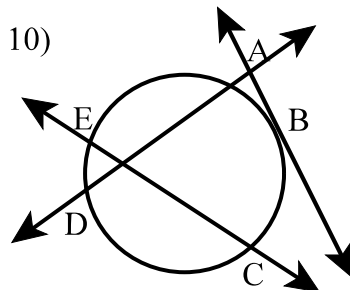
Find the measures of all of the angles.



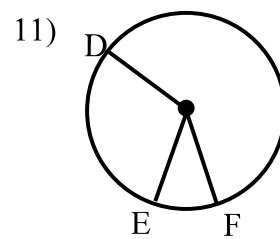
Identify radii, chords, and diameters.



Identify tangents and secants.



Identify major and minor arcs and semi-circles.



Given one measure in a circle, find the missing measures. (If missing, give circumference in both forms.)

- | | | | |
|-------------------------|----------------------|------------------------|----------------------------|
| 12) $r =$ | 13) $r =$ | 14) $r =$ | 15) $r =$ |
| $d =$ | $d =$ | $d =$ | $d =$ |
| $C =$ | $C = 123 \text{ mi}$ | $C = 77\pi \text{ km}$ | $C =$ |
| $A = 3117 \text{ mm}^2$ | $A =$ | $A =$ | $A = 1444\pi \text{ ft}^2$ |

Use the Pythagorean Theorem to identify each triangle as acute, right or obtuse.

16) 28, 64, 60

17) 105, 50, 92

18) 77, 36, 85

19) 97, 72, 65

20) 20, 21, 22

21) 132, 170, 84

The ratio of apple trees to nectarine trees in an orchard is 6:5.

22) If there are 348 apple trees, how many nectarine trees are there?

23) If there are 560 nectarine trees, how many apple trees are there?

A chemical solution contains 3 parts acid for every 22 parts water.

24) If there are 51 parts acids, how many parts water are there?

25) If there are 814 parts water, how many parts acid are there?

Refer to the circles at the right to find the length of the indicated arc.

26) \widehat{BA}

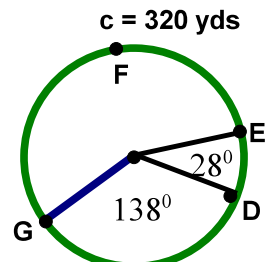
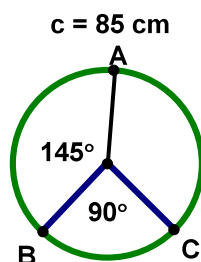
27) \widehat{DE}

28) \widehat{DG}

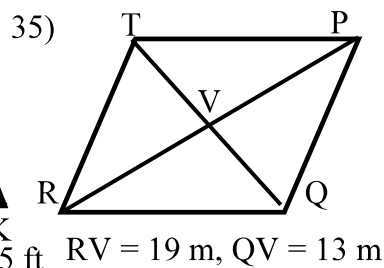
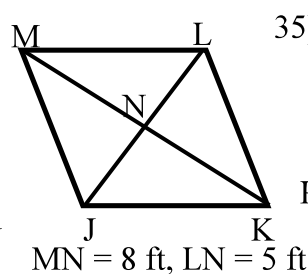
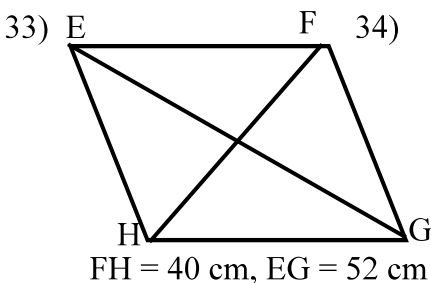
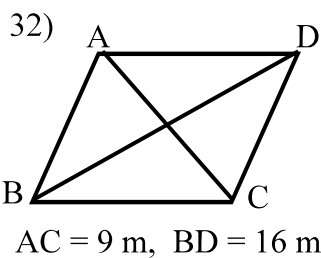
29) \widehat{AC}

30) \widehat{AE}

31) \widehat{DCE}



Find the area of each rhombus.



Find the surface area and volume of each figure.

