Geometry Development 5.1

Geometry

1) John parks his car in the lot with 7 other cars. Lightning strikes a car in the parking lot. What is the probability that it was John's car that was struck? Give the answer as a fraction, a decimal, and a percentage.

A stained glass window has eighteen panes. Four are red, five are blue, seven are gold, and two are orange. A little boy hits a baseball through one of the panes. Give the answer as a fraction, a decimal, and a percentage.

2) What is the probability the pane is red?

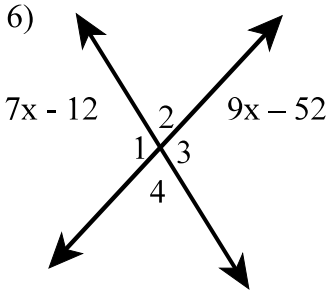
3) What is the probability the pane is blue?

4) What is the probability the pane is gold?

5) What is the probability the pane is orange?

Find the measures of all of the angles.

6)



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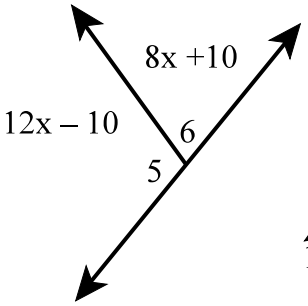

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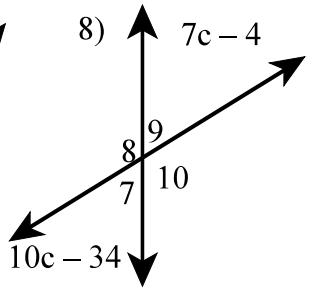

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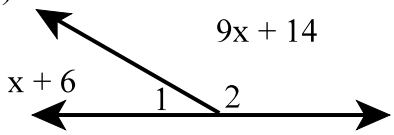
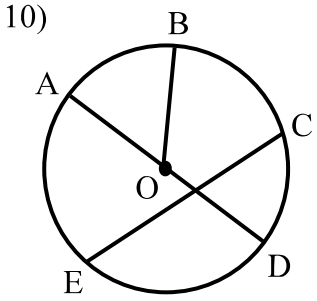


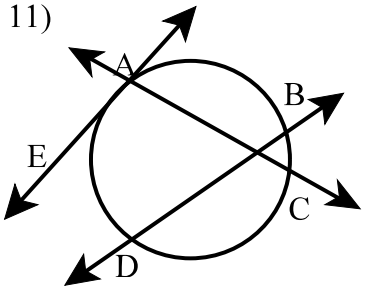
Identify radii, chords, and diameters.

10)



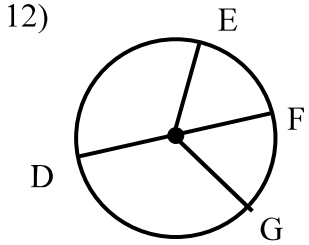
Identify tangents and secants.

11)



Identify major and minor arcs and semi-circles.

12)



Given one measure in a circle, find the missing measures. For Circ. and Area find answers in both forms.

13) r = 13 m

d =

C =

A =

14) r =

d =

C = 10πcm

A =

15) r =

d = 15 in

C =

A =

16) r =

d =

C = 58 ft

A =

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

17) 15, 12, 5

18) 7, 25, 24

19) 20, 29, 25

20) 28, 45, 53

21) 16, 55, 65

22) 35, 42, 12

The ratio of black cars to white cars in the school parking lot is 3:5.

23) If there are 57 black cars, how many white cars are there?

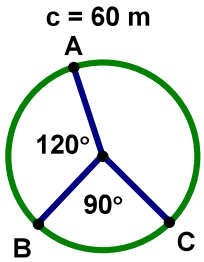
24) If there are 65 white cars, how many black cars are there?

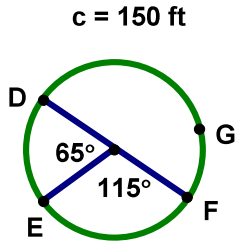
The ratio of latino students to polynesian students is 7:4.

25) If there are 56 polynesian students, how many latino students are there?

26) If there are 63 latino students, how many polynesian students are there?

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





27) $\overset{\frown}{BC}$

28) $\overset{\frown}{AB}$

29) $\overset{\frown}{EF}$

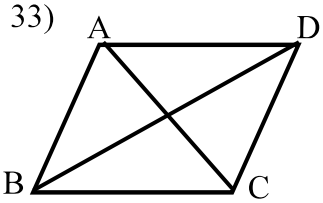
30) $\overset{\frown}{DE}$

31) $\overset{\frown}{AC}$

32) $\overset{\frown}{DGF}$

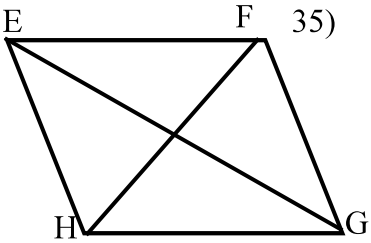
Find the area of each rhombus.

33)



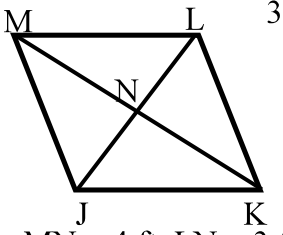
AC = 10 m, BD = 12 m

34)



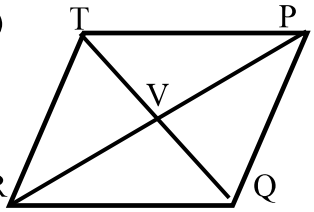
FH = 18 cm, EG = 24 cm

35)



MN = 4 ft, LN = 3 ft

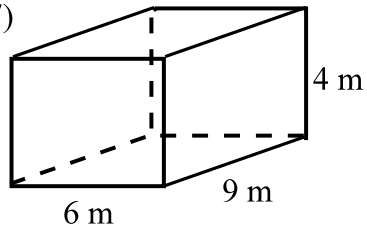
36)



RV = 14 m, QV = 11 m

Find the surface area and volume of the following figures.

37)



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