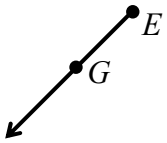
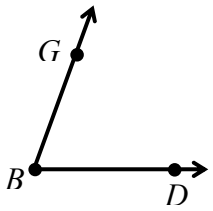
Review for Chapter Nine Exam

Identify each figure as a line, a ray, a line segment, or an angle. Then name the figure using the given points.

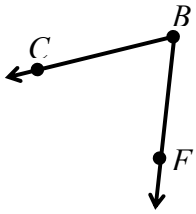
1.



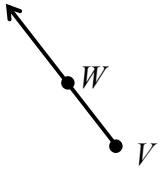
2.



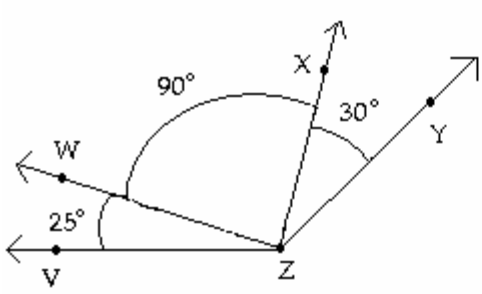
3.

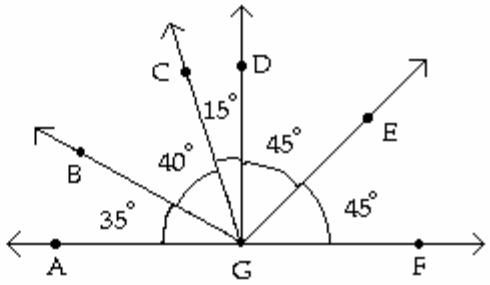


4.



Find the measure of the angle.

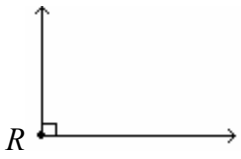




5. $\angle BGC$ **6**. $\angle VZW$ **7**. $\angle EGB$ **8**. $\angle BGE$

Classify each angle as acute, right, obtuse, or straight.

9.



10. 70°

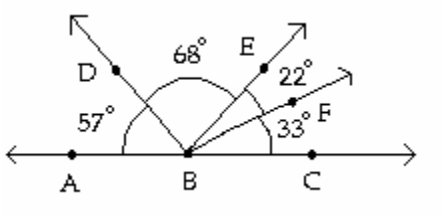
11. The measure of an obtuse angle is _____.

Find the indicated angle.

12. Find the complement of 49°

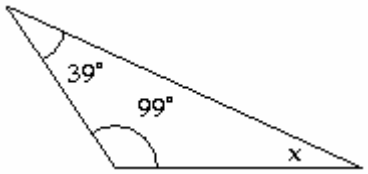
13. Find the supplement of 16°

14. Identify the pair or pairs of complementary angles.



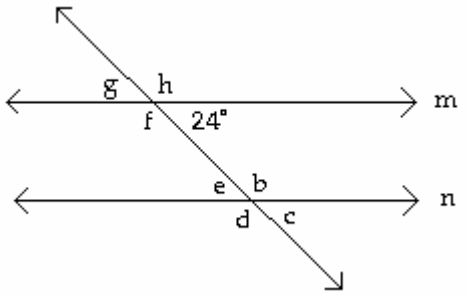
Find the measure of the unknown angles. Figures are not drawn to scale.

15. Find the measure of $\angle x$.

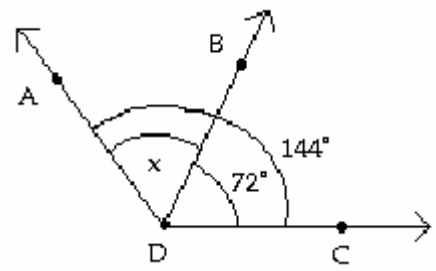


16. Find the measure of $\angle h$.

$m \parallel \tilde{n}$



17. Find the measure of $\angle x$.



Convert as indicated.

18. 192 inches to feet

19. 40 km to meters

20. 20 yards to feet

21. 9.7 miles to feet

22. 95.7 dm to meters

23. 138 oz to pounds

24. 251.3 cm to millimeters

25. 37 tons to pounds

26. 59 kg to grams

27. 6.5 lb to ounces

28. 118 kg to grams

29. 45 qt to gallons

30. 351 g to milligrams

31. $7\frac{1}{2}$ pt to cups

32. $2\frac{1}{2}$ gal to quarts

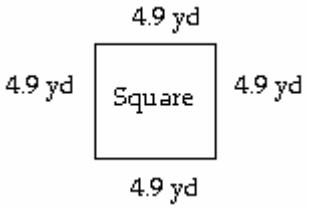
33. 380 L to centiliter

34. 8800 ml to liters

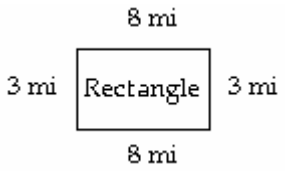
35. 89 ml to deciliter

Find the perimeter of each figure.

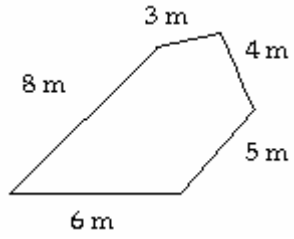
36.



37.



38.



Solve.

39. The sides of a triangle are 881 ft, 411 ft, and 652 ft. Find its perimeter.

40. A regular octagon has a side length of 7 m. Find its perimeter.

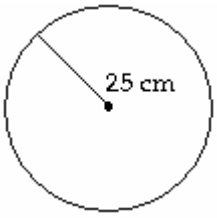
41. A rectangular room measures 12 ft by 13 ft. Find the cost of installing a strip of wallpaper around the room if the wallpaper costs \$0.52 per foot.

Find the circumference of each circle.

42.

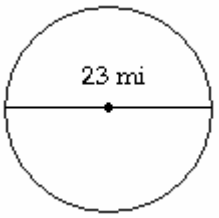
Approximate the circumference using $\pi = 3.14$.

43.



Find exact circumference.

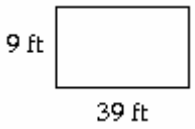
44.



Approximate the circumference using $\pi = 3.14$.

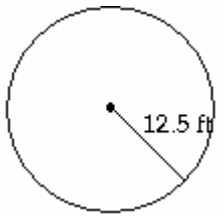
Find the area.

45. Find the area of the rectangle.



46. Find the area of a circle when its circumference is 17.2π units.

47. Find the area of the circle. Use 3.14 for π. Round results to two decimal places if necessary.

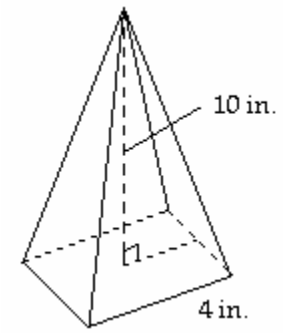


Solve.

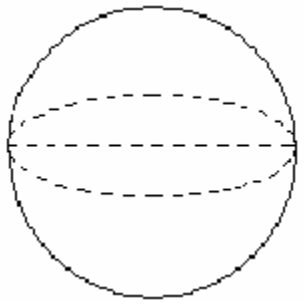
48. A drapery panel measures 6 ft by 9 ft. Find the number of square feet of material needed for four panels.

Find the volume of the solid.

49. Square-based pyramid

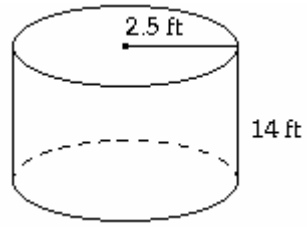


50. Use 3.14 as the approximate value for π. Round results to the nearest hundredth if necessary.



Sphere with diameter of 2.1 units

51. Use 3.14 as the approximate value for π. Round results to the nearest tenth, if necessary.



Solve the problem.

52. Find the volume of a box in the shape of a cube that is 8 inches on each side.

53. Find the volume of a box 3 in. x 7 in. x 9 in.

54. A paperweight is in the shape of a square-based pyramid 14 centimeters tall. If an edge of the base is 7 centimeters, find the volume of the pyramid.

ANSWERS

1 ray; $\overrightarrow{EG}$ **2**. angle; $\angle$B **3**. angle; $\angle$B **4**. ray; $\overrightarrow{VW}$ **5**. 40° **6**. 25° **7**. 100° **8**. 100°
9. Right **10**. Acute **11**. between 90° and 180° **12**. 41° **13**. 164°
14. $\angle ABD$ and $\angle FBC$; $\angle DBE$ and $\angle EBF$ **15**. 42° **16**. 156° **17**. 72° **18**. 16 **19**. 40,000 m

20. 60 **21**. 51,216 **22**. 9.57 m **23**. $8\frac{5}{8}$ lb **24**. 2,513 mm **25**. 74,000 lb **26**. 59,000 grams

27. 104 oz **28**. 118,000 grams **29**. $11\frac{1}{4}$ gal **30**. 351,000 milligrams **31**. 15 c **32**. 10 qt

33. 38,000 cl **34**. 8.8 L **35**. 0.89 dl **36**. 19.6 yd **37**. 22 mi **38**. 26 m **39**. 1,944 ft **40**. 56 m
41. $26.00 **42**. 452.16 mi **43**. 50 π cm **44**. 72.22 mi **45**. 351 sq. ft **46**. 73.96 π sq. units

47. 490.63 ft^2 **48**. 216 sq. ft **49**. $53\frac{1}{3}$ cu. in. **50**. 4.85 cu. units **51**. 274.8 cu. ft **52**. 512 cu. in.

53. 189 cu. in. **54**. $228\frac{2}{3}$ cu. cm