Name _____ Date _____

Perimeter and Area

Complete.

1. If the height of a parallelogram is 38.9 mm and the base is 40.8 mm, what is the area of the parallelogram?	2. If the base of a rectangle is 18.6 mm and the area is 719.82 mm^2, what is the perimeter of the rectangle?

Complete.

3. Find the area of the parallelogram whose vertices are (-6, 0), (0, -3), (-3, 0), and (-3, -3)	4. Find the area of the square whose vertices are (0, 3), (0, 6), (5, 3), and (5, 6)

Complete.

5. If the height of a rectangle is 6 2/5 cm and the area is 36 4/5 cm^2, what is the length of the base of the rectangle?	6. If the height of a rectangle is 1 2/3 mm and the base is 4 1/3 mm, what is the perimeter of the rectangle?

Complete.

7. The perimeter of a rectangle is 48 cm. The height is eight less than three times the base. What is the area?	8. The perimeter of a rectangle is 98 cm. The height is four more than four times the base. What is the length of the base?

Complete.

9. What is the area of a triangle with base 29 mm and height 18 mm?	10. What is the height of a triangle with base 29 mm and area 362.5 mm^2?

Find the missing measurement of each trapezoid.

11. $height = 12$ m $b_1 = 29$ m $b_2 =$ _____ $area = 210$ m^2	12. $height = 12$ cm $b_1 = 12$ cm $b_2 = 13$ cm $area =$ _____	13. $height = 18$ m $b_1 =$ _____ $b_2 = 28$ m $area = 297$ m^2

Complete.

14. Find the area of the triangle whose vertices are (-5, -13), (-10, -5), and (-5, -5)	15. Find the area of the triangle whose vertices are (9, -1), (14, 4), and (9, 4)

Complete.

16. Find the area of the square whose vertices are (0, 1), (-5, 1), (0, -3), and (-5, -3)	17. Find the area of the square whose vertices are (-3, 0), (1, 0), (-3, -5), and (1, -5)

Complete.

18. Find the area of the trapezoid whose vertices are (6, 5), (-5, 5), (6, 0), and (3, 0)	19. Find the area of the trapezoid whose vertices are (1, -3), (-3, 2), (7, 2), and (-3, -3)

Complete.

20. What is the area of a triangle with base 9 5/6 cm and height 8 cm?	21. What is the height of a triangle with base 3 1/2 mm and area 11 2/3 mm^2?

Find the missing measurement of each trapezoid.

22. *height* = 10 mm b_1 = 2 mm b_2 = _____ *area* = 16 mm^2	23. *height* = 9 1/3 cm b_1 = 3 1/4 cm b_2 = 7 2/3 cm *area* = _____	24. *height* = _____ b_1 = 2 3/4 mm b_2 = 3 mm *area* = 7 19/40 mm^2

Find the missing length for each right triangle. Simplify your answer.

25. a = 12 b = 35 c = _____	26. a = 8 b = _____ c = 17	27. a = 16 b = _____ c = $\sqrt{481}$

Find the circumference of each circle. State your answer in terms of π and also round your answer to the nearest tenth.

28. diameter = $\frac{16}{5}$ cm	29. radius = 6 m	30. diameter = 30.72 m

Find the area of each circle. State your answer in terms of π and also round your answer to the nearest tenth.

31. diameter = $\frac{5}{3}$ cm	32. radius = 3 m	33. radius = 22 mm

Find the radius of the circle. (*use $\pi = 3.14$*)

34. $A = 45.0241\pi$ cm^2	35. $A = 1384.74$ m^2	36. $C = 42\pi$ mm

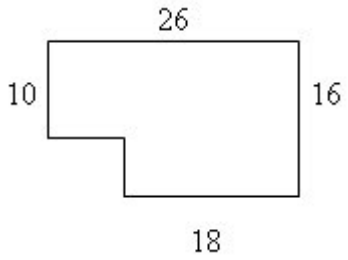
Complete.

37. Find the area of the triangle whose vertices are (8, -2), (8, 6), and (16, -2)	38. Find the area of the trapezoid whose vertices are (2, 2), (-3, 6), (2, 6), and (-7, 2)

Complete.

39. If the perimeter of an equiangular triangle is 30 centimeters, what is the length of one of its sides?	40. If it takes ninety-seven gallons of paint to paint a center stripe around a circular track that has a radius of one-fourth of a mile, then how much paint would it take to paint a center stripe around a circular track that had a radius of one-sixth of a mile?

Complete.

41. Nathan rakes leaves during the fall to earn money. He is not a real fast worker but he does a good job. Mr. Snyder's yard is shaped like the following figure (dimensions in feet). If he rakes at a rate of seven square feet per minute, how long will it take him to rake Mr. Snyder's yard?  	42. If a piece of paper is folded in half two times and the resulting folded paper is a square with an area of twenty-five square centimeters, what were the dimensions (length and width) of the piece of paper before it was folded?