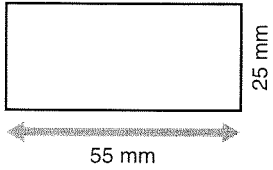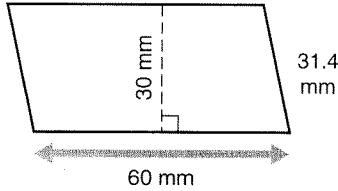Use the value of π from your calculator or $\pi \approx 3.1416$ to compute the perimeter or circumference to the nearest millimeter and the area to the nearest square millimeter of each figure in exercises 13 to 18. Then determine each area to the nearest .01 square centimeter. (*Hint:* In some cases the Pythagorean theorem will be needed to find the length of a side or hypotenuse of a right triangle, see section 6.4.)
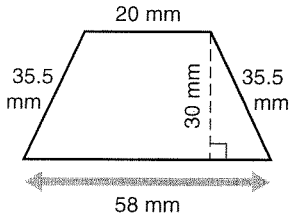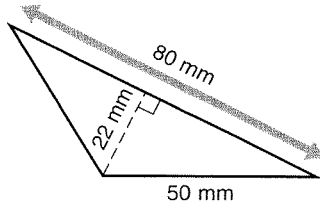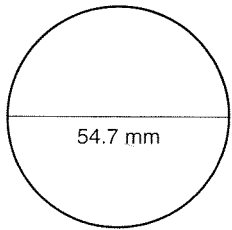
13. a. Rectangle

25 mm

55 mm

b. Parallelogram

30 mm

31.4 mm

60 mm

14. a. Trapezoid

20 mm

35.5 mm

30 mm

35.5 mm

58 mm

b. Scalene triangle

80 mm

22 mm

50 mm

15. a. Circle

54.7 mm

b. Trapezoid

39 mm

48.6 mm

33.6 mm

36 mm
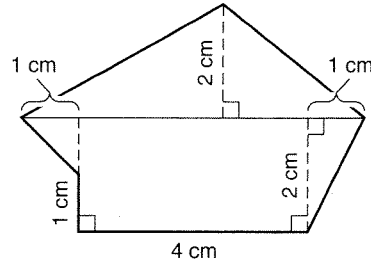
18. a. Rectangle

50 mm
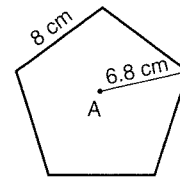
48 mm
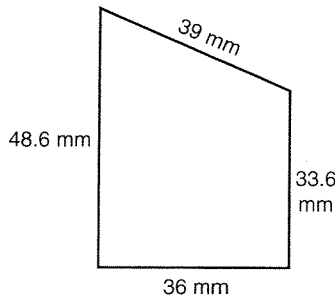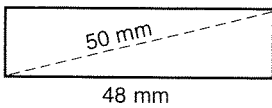
b. Isosceles triangle

34 mm

32 mm
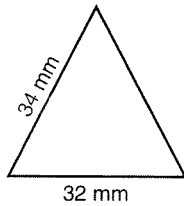
The area of a polygon can be found by subdividing it into smaller regions. Use this principle to find the area of the polygons in exercises 19 and 20 to the nearest .1 square centimeter.

19.

1 cm   2 cm   1 cm

1 cm   2 cm

4 cm

20. Regular pentagon with center A

8 cm

6.8 cm

A

For Friday, Mr 12
Bring the Prism,
Pyramid, and Cylinder
from Material Card 38.