

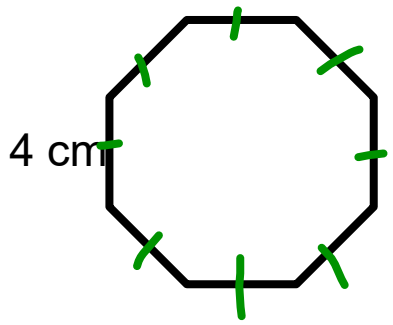
Grade 7

Date: Nov. 18

Day 2

a) Find the perimeter of the regular octagon (Show work)

$\Rightarrow$ 8 sides



all side equal

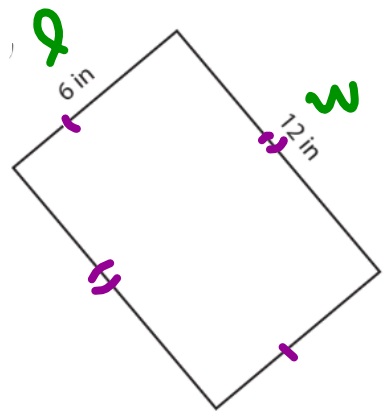
all angles equal

$P_{octagon} = 8 \times Side$

$= 8 \times (4\,cm)$

$= 32\,cm$

b) Find the perimeter (Show work)



Rectangle

$P = S + S + S + S$ OR $P = 2(l + w)$

$= 6in + 12in + 6in + 12in$

$= 36\,in$

$= 2(6in + 12in)$

$= 2(18in)$

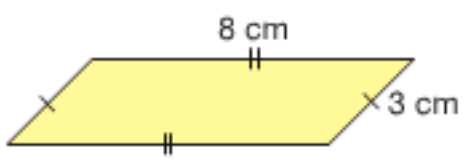
$= 36\,in$

Homework solutions Page 229 #1 to 4

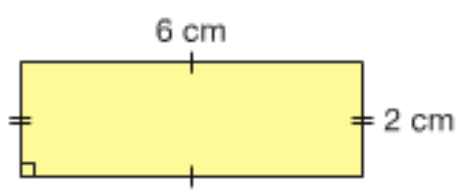
Practice

1. Find the perimeter of each polygon.

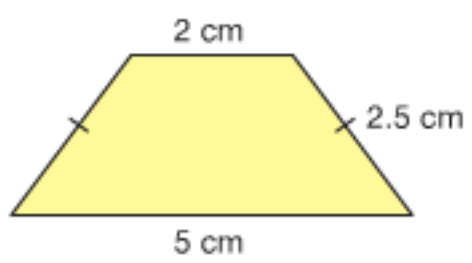
a)



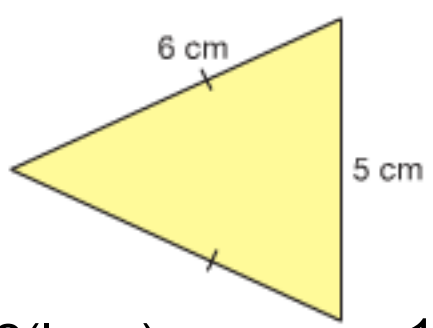
b)



c)



d)



1a) P = 2(l + s)

= 2(8cm + 3cm)

= 2 (11 cm)

= 22 cm

1b) P = 2(l + s)

= 2(6cm + 2cm)

= 2 (8 cm)

= 16 cm

1b) P = 2 s + top + bottom

= 2(2.5 cm) + 2cm + 5 cm

= 5 cm + 2cm + 5 cm

= 12 cm

1d) P = side + side +side

= 6 cm +6 cm +5 cm

= 17 cm

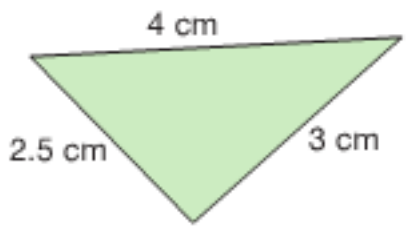
2. Describe the strategy you used to find the perimeter of each polygon in question 1.

(See the first line in each perimeter statement)

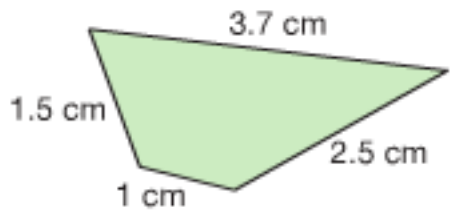
Homework solutions Page 229 #1 to 4

3. Find the perimeter of each polygon.

a)



b)



Can you write a rule to find the perimeter of each of these polygons? Why or why not? Cannot since no sides are equal

3a) P = side + side +side

= 4 cm + 3 cm + 2.5 cm

= 9.5 cm

3b) P = side + side +side + side

= 1.5 cm + 3.7 cm + 2.5 cm + 1 cm

= 8.7 cm

4. Use Pattern Blocks like those below.



Write a rule to find the perimeter of each Pattern Block.

perimeter of Equilateral triangle = 3 (side)

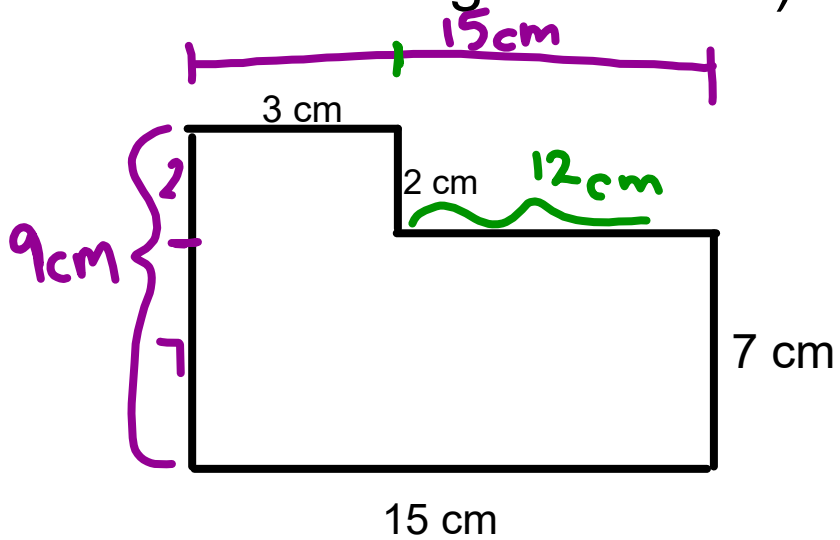
perimeter of rhombus = 2(s + l)

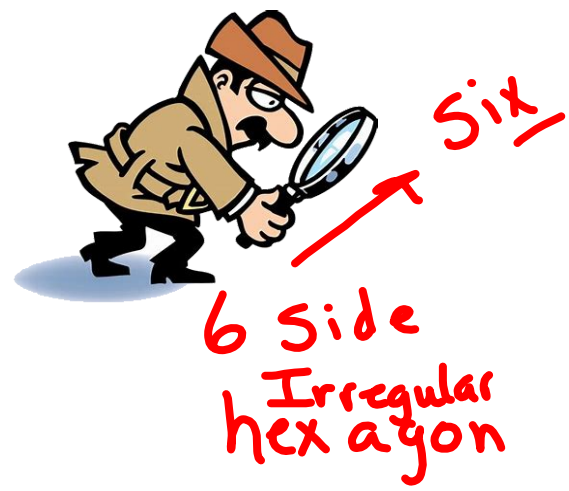
perimeter of Trapezoid = 2(side) + top + bottom

perimeter of Regular Hexagon = 6 (side)

Find the perimeter of the following

(hint: need to find the missing sides first)





$P = S + S + S + S + S + S$

$= 3\text{cm} + 2\text{cm} + 12\text{cm} + 7\text{cm} + 15\text{cm} + 9\text{cm}$

$= 48\text{cm}$

Class/Homework

Old grade 6 Textbook

Page 229 #5,

#6,ac

#7(use a ruler,draw a sketch in notebook)

#8 (Measure from book, draw a sketch in notebook)

Worksheet

(0n next slide)

Once WS. Done then work on this

H.W.

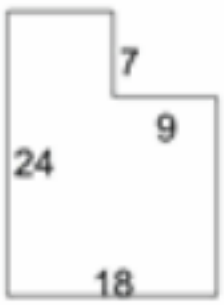
Worksheet

Area and perimeter of irregular shapes

Grade 6 Geometry Worksheet

Find the perimeter ~~and area~~

1.



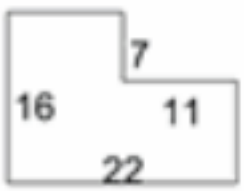
3.



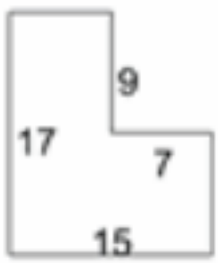
5.



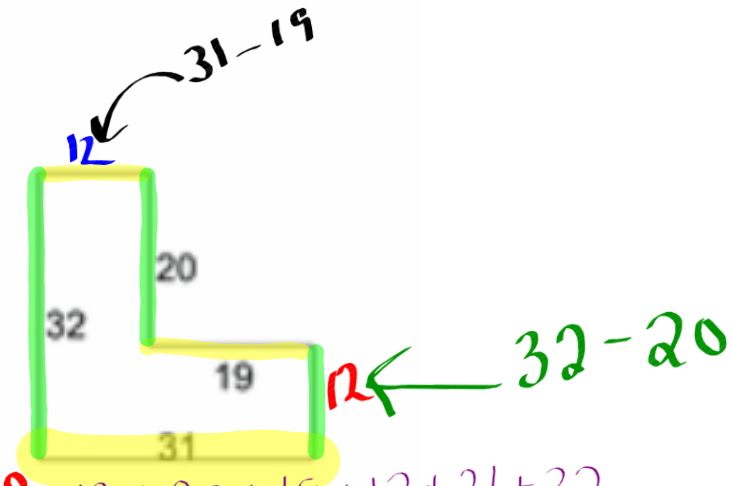
2.



4.



6.



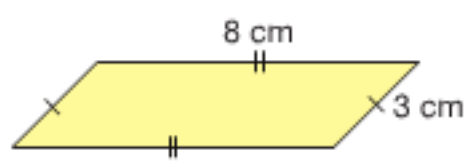
P = 12 + 20 + 19 + 12 + 31 + 32

=

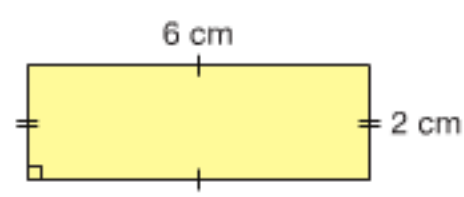
Practice

1. Find the perimeter of each polygon.

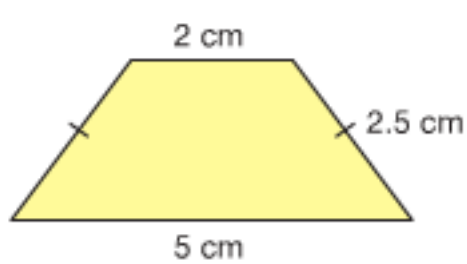
a)



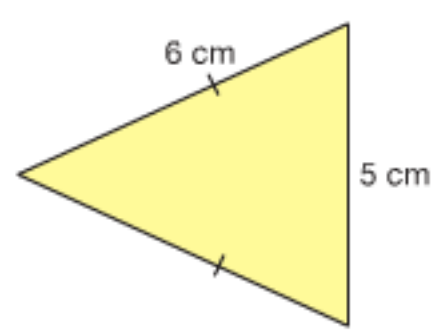
b)



c)



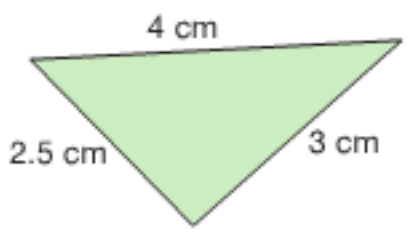
d)



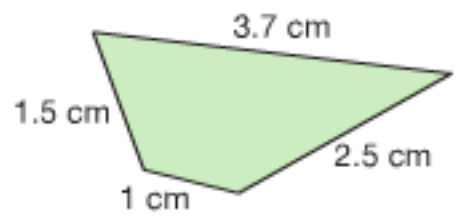
2. Describe the strategy you used to find the perimeter of each polygon in question 1.

3. Find the perimeter of each polygon.

a)

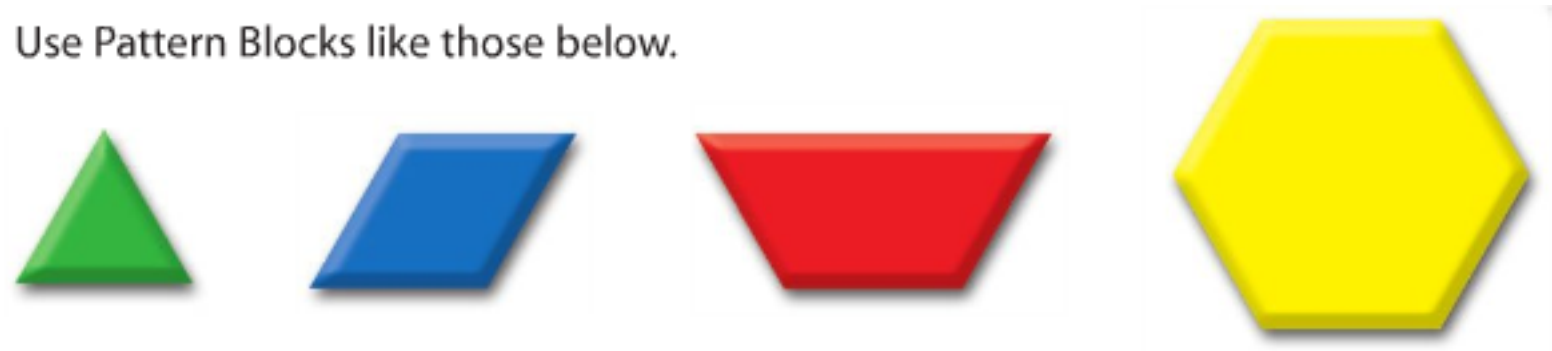


b)



Can you write a rule to find the perimeter of each of these polygons? Why or why not?

4. Use Pattern Blocks like those below.

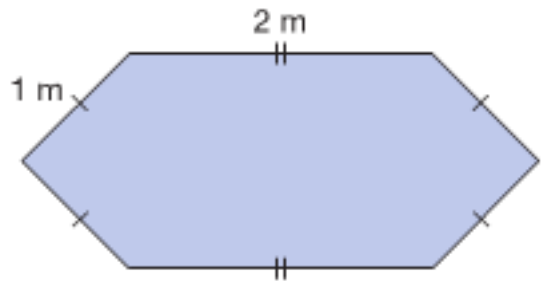


Write a rule to find the perimeter of each Pattern Block.

5. Aldo wants to install a skylight in the roof of his house. The base of the skylight is a regular hexagon with side length 40 cm. What is the perimeter of the base of the skylight? Give your answer in metres.
Which strategy did you use to find out?

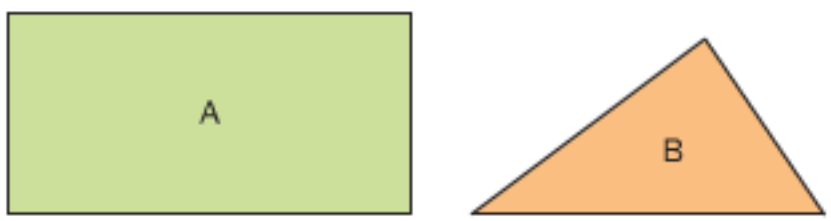


6. Winnie is building a hexagonal storage box. Here is a drawing of the top of the box.



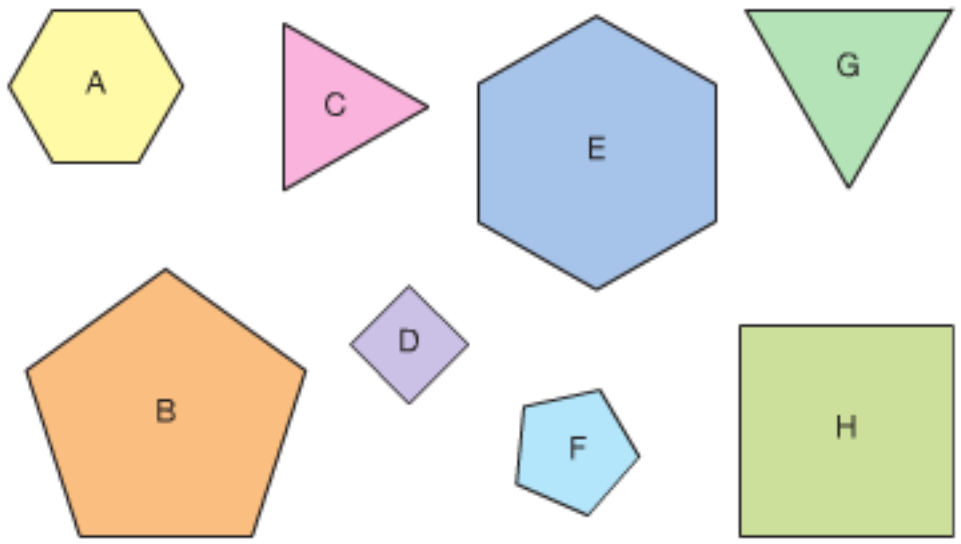
   a) Write a rule to find the perimeter of the top of the box.
   b) Write the rule as a formula.
   c) What is the perimeter of the top of the box?

7. a) Find the perimeter of each polygon.



   b) Suppose the side lengths of each polygon are doubled. What would happen to each perimeter? Explain.

8. Your teacher will give you a large copy of these regular polygons.



a) Find and record the perimeter of each polygon.

b) How is the perimeter of a regular polygon related to the number of its sides?
Write a formula to find the perimeter of a regular polygon.

9. Saki has a remote control car. She enters her car in a race. The track is close to rectangular.

a) Use a formula to find the perimeter of the track.

b) Suppose the car completes 8 laps.
How far did the car travel?

