Chapter 18: Area and Perimeter - Worksheet 1

1. Find the perimeter of each of these shapes
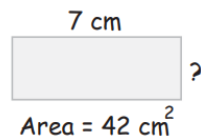
a) 1.2cm

b) 3.15cm / 6.73cm

c) 7b / 5a / 10a

d) 3a / 2a - 5b

e) a^2 / a^2 / 2a / 2a / 4a

f) 2(a - 3b) / 3(2a + b)
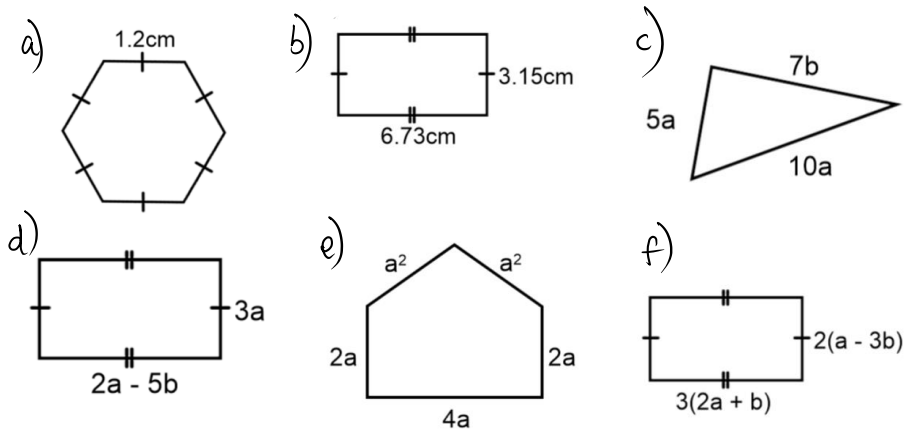
2. Find the value of x and the length of the sides for each triangle.

a)
B / x / $x+8$ / C / $3x+2$ / D

Perimeter = 30 cm ; x = _____

$\overline{BC}$ = _____ ; $\overline{CD}$ = _____ ; $\overline{BD}$ = _____

b)
R / $x+6$ / $x+3$ / P / $x+2$ / Q

Perimeter = 41 mm ; x = _____

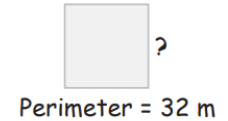$\overline{PQ}$ = _____ ; $\overline{QR}$ = _____ ; $\overline{PR}$ = _____
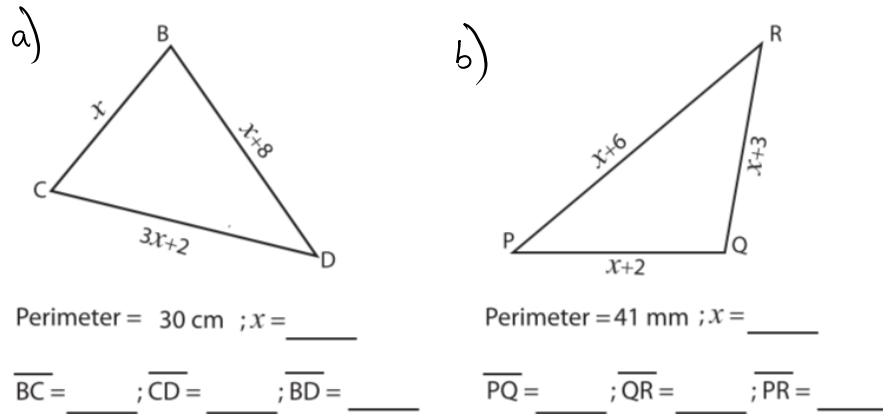
3. Find the lengths of the unknowns sides.

(1) The area of a rectangle is 42 cm.^{2}
If its length is 7 cm, what is its width?
Answer:

7 cm
?
Area = 42 cm^2

(2) The perimeter of a square is 32 meters.
Find the length of one side of the square.
Answer:

?
Perimeter = 32 m

4. Work out the area of each of these shapes.

a) 3cm / 8cm / 7cm / 2cm / 16cm / 14cm

b) 20cm / 7cm / 6cm / 16cm / 9cm

c) 5cm / 5cm / 7cm / 2cm / 16cm / 14cm
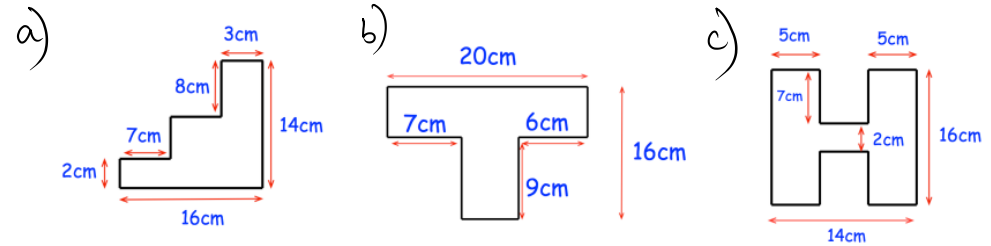
5. Problems

Question 1: A farmer has a field that is 300m long and 70m wide.
Calculate the area of the field.

Question 2: A piece of paper has a length of 18cm and a width of 6cm.
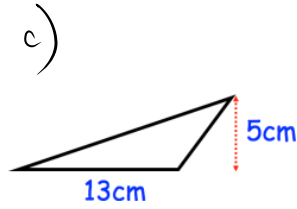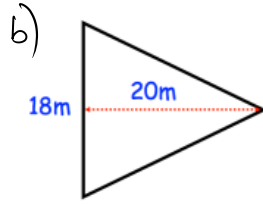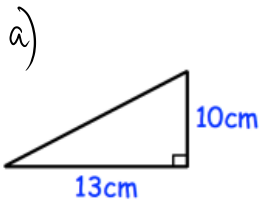Find the area of paper.

Question 3: A rectangle has an area of 30cm^2
Write down the length and width of **three** rectangles with an area of 30cm^2

Question 4: These two rectangles have the same area.
Find the length of the second rectangle.

8cm
5cm
×
2cm

Question 5: A rectangle has an area of 80cm^2 and a perimeter of 48cm.
Find the length and width of the rectangle.

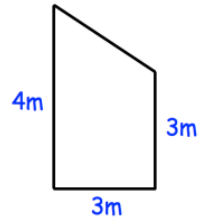## 6. Find the area each of triangle

a)

10cm
13cm

b)

20m
18m

c)

5cm
13cm

Question 1: Find the area of the triangle with a base of 12cm and perpendicular height of 9cm.

7.
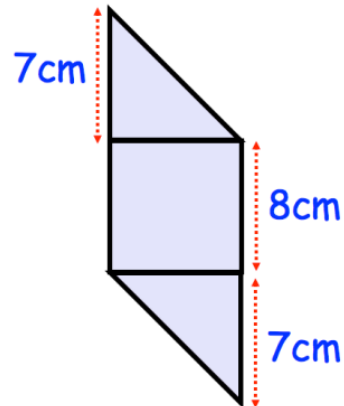
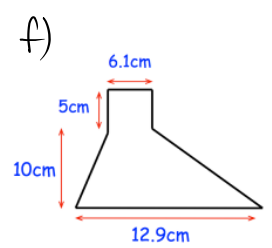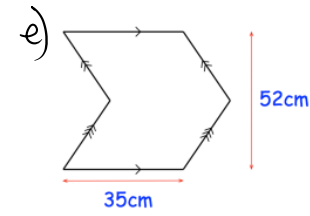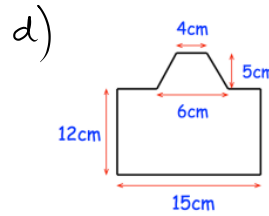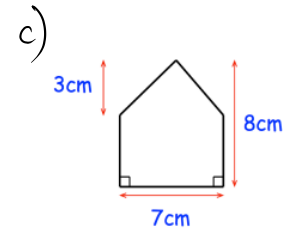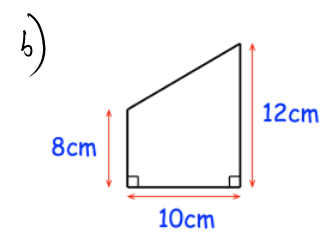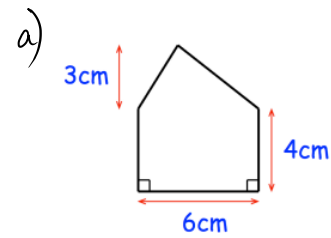Question 2: The area of the triangle is 165cm², find b.

15cm
b
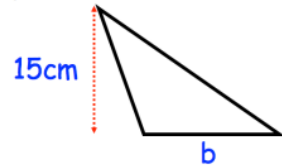
Question 3: Shown below is a wall. Calculate the area of the wall.

4m
3m
3m

Question 4: Shown below is a logo made from a square and two triangles. Calculate the area of the logo.

7cm
8cm
7cm

8. Work out the area of each of these shapes

a)

3cm
4cm
6cm

b)

8cm
12cm
10cm

c)

3cm
8cm
7cm

d)

4cm
5cm
6cm
12cm
15cm

e)

52cm
35cm

f)

6.1cm
5cm
10cm
12.9cm

9. Calculate the area of each shaded triangle.

a) EFGH is a square

E   F
10 cm
G   6 cm   H

Area: _____

b) ABCD is a rectangle

A   B
4 cm
D   10 cm   C

Area: _____