

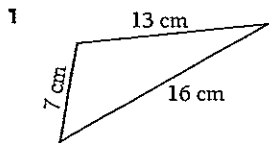
# 9:05 | Perimeter

Name: \_\_\_\_\_ Class: \_\_\_\_\_

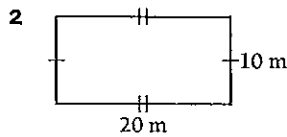
## Examples



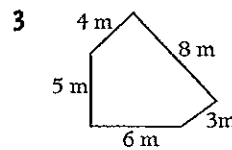
- Perimeter is the total length around a shape.
- The same marking on sides mean they have the same length.
- For a square,  $P = 4 \times \text{side}$ .
- For a rectangle,  $P = 2 \times \text{length} + 2 \times \text{breadth}$ .



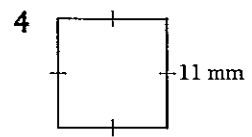
$$P = (7 + 13 + 16) \text{ cm} \\ = 36 \text{ cm}$$



$$P = 2 \times 20 + 2 \times 10 \text{ m} \\ = 60 \text{ m}$$



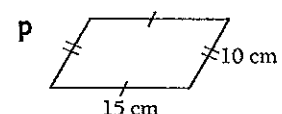
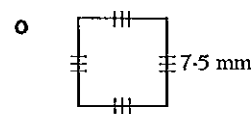
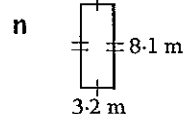
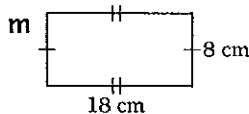
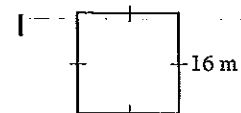
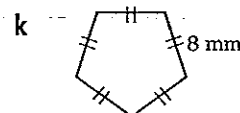
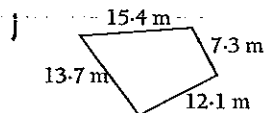
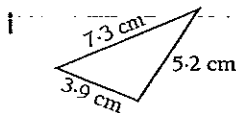
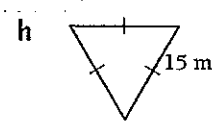
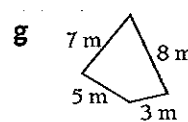
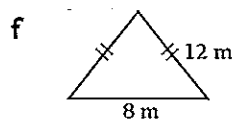
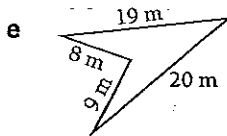
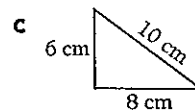
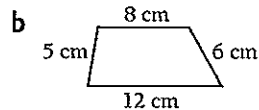
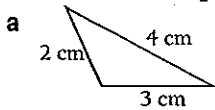
$$P = 4 + 8 + 3 + 6 + 5 \text{ m} \\ = 26 \text{ m}$$



$$P = 4 \times 11 \text{ mm} \\ = 44 \text{ mm}$$

## Exercise

1 Calculate each perimeter.



2 Find the perimeter of the following shapes.

- a square of side length 10 cm
- a rectangle with a length of 16 m and a breadth of 5 m
- a square with a side length of 50 m
- a rectangle with a length of 1.9 cm and a width of 1.1 cm
- a rectangle with length 37 mm and breadth 30 mm
- a square with sides 3.6 cm long
- a square with each side length 110 m
- a rectangle with length 2.5 cm and breadth 1.7 cm
- a triangle with sides 17 cm, 24 cm and 36 cm
- a quadrilateral with sides of length 9.3 m, 14 m, 16.2 m and 20.7 m

**9:02 Units of Length**

- 1 a 2 cm    b 3 cm    c 6 cm    d 9 cm    e 9 cm    f 12 cm
- 2 a 80    b 3    c 9    d 8    e 7000    f 900    g 3000    h 120  
 i 5    j 15    k 2000    l 11 000    m 5    n 10 000    o 8    p 6  
 q 12    r 200    s 62    t 6000
- 3 a 180    b 120    c 2    d 10    e 300    f 8    g 1440    h 5  
 i 1200    j  $\frac{1}{2}$     k 15    l 420    m 720    n 600    o 240    p  $\frac{1}{4}$

**9:03 Measuring Length**

- 1 a 5 cm    b 4 cm    c 2 cm    d 2 cm    e 7 cm    f 4 cm    g 5 cm    h 3 cm  
 i 8 cm    j 2 cm
- 2 a 32 mm    b 8 mm    c 35 mm    d 25 mm    e 51 mm    f 18 mm    g 63 mm    h 74 mm

**9:05 Perimeter**

- 1 a 9 cm    b 31 cm    c 24 cm    d 64 cm    e 56 m    f 32 m    g 23 m    h 45 m  
 i 16.4 cm    j 48.5 m    k 40 mm    l 64 m    m 52 cm    n 22.6 m    o 30 mm    p 50 cm
- 2 a 40 cm    b 42 m    c 200 m    d 6 cm    e 134 mm    f 14.4 cm    g 440 m    h 8.4 cm  
 i 77 cm    j 60.2 m

**9:06 The Calendar and Dates**

- 1 a 14    b 3    c 1095    d 8    e 56    f 48    g 70    h 12  
 i 52    j 120    k 40    l 6
- 2 a 7    b 23    c 22    d 22    e 28 (or 29 in leap year)    f 91    g 66  
 h 28    i 61    j 25

**9:07 Clocks and Times**

- 1 a 60    b 120    c 600    d 1440    e 30    f 90    g 300    h 330  
 i 15    j 135    k 660    l 420
- 2 a 5 minutes to 9    b 20 minutes to 4    c 10 minutes past 12    d 20 minutes past 3  
 e 15 minutes past 6    f 25 minutes to 1    g 10 minutes to 4    h 20 minutes to 1  
 i 30 minutes past 12    j 15 minutes past 11    k 25 minutes past 9    l 25 minutes to 5

**9:08 Operating With Time**

- 1 a 7 h 30 min    b 7 h 20 min    c 6 h 35 min    d 5 h 40 min  
 e 10 h 55 min    f 14 h 5 min    g 13 h 30 min    h 4 h 53 min  
 i 10 h 26 min    j 4 h 42 min    k 2 h 46 min    l 5 h 14 min
- 2 a 3 h    b 4 h    c 6 h    d 7 h    e 11 h    f 11 h  
 g 7 h    h 5 h    i 12 h    j 5 h    k 12 h    l 9 h
- 3 a 15 min    b 22 min    c 30 min    d 25 min  
 e 1 h 20 min    f 1 h 20 min    g 2 h 30 min    h 3 h 15 min  
 i 34 min    j 2 h 20 min    k 1 h 5 min    l 23 min

**10:02 Making Sense of Algebra**

- 1 a  $x+2$     b  $y+3$     c  $3x$     d 6    e  $a+8$     f  $4y+3$     g  $2x+3$     h  $y+5$   
 i  $3a+3$     j  $5y+3$
- 2 a  $2y+1$     b  $2x+y$     c  $x+y$     d  $3x+2y$   
 e  $a+3b$     f  $2x+3$     g  $2a+3b$     h  $3x+4$   
 i  $5x+2y$     j  $4y+5$     k  $2x+y+2$     l  $a+3b+2$   
 m  $3a+2b+1$     n  $x+2y+3$     o  $m+n+4$

**10:03 Substitution**

- 1 a 36    b 40    c 11    d 3    e 9    f 15    g 0    h 63  
 i 8    j 36    k 17    l 24    m 1    n 6    o 4    p 5
- 2 a 2    b 8    c 20    d 16    e -3    f 8    g 19    h 20  
 i 3    j 124    k 24    l 48    m -8    n -8    o 7    p 52  
 q -3    r 12    s 28    t 30    u 3