10 Squares Rectangle

3

5

a = 11

b = 6

C = 17

d = 23

e = 24

f = 19

g = 22

h = 25

Solution: Sizes of squares are

3 x 3

5 x 5

6 x 6

11 x 11

17 x 17

19 x 19

22 x 22

23 x 23

24 x 24

25 x 25

f = a + 5 + 3

f = a + 8 ………………………………….(1)

d + b = e + 5 …………………………… (2)

e = f + 5 ………………………………… (3)

b = a – 5 ………………………………… (4)

g = f + 3 ………………………………….(5)

a + b = c ……………………………….. (6)

d = b + c ………………………………. (7)

d + e = g + h ………………………….. (8)

Using (3) and (4) in (2) ,

d + a – 5 = f + 5 + 5

d + a = f + 15

using (1) ,

d + a = a + 8+ 15

d = 23

d + e = g + h

23 + e = g + h

Using (3),

23 + f + 5 = g + h

Using (5),

23 + f + 5 = f + 3 + h

28 = 3 + h

h = 25

Using (4) and (6)

a + b = c

a – b = 5

2b = c – 5

From (7)

b + c = 23

c = 23 –b

2b = 23 –b – 5

3b = 18

b = 6

using in (6)

a – 6 = 5

a = 11

using in (7)

c = 23- 6

c = 17

Using (1)

f = 11 + 8

f = 19

Using (5)

g = 19 + 3

g = 22

using (8)

d + e = g + h

23 + e = 22 + 25

e = 24