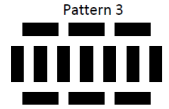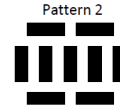Express 135 as a product of prime factors in the form $2^a \times 3^b \times 5^c \times 7^d$. What are the values a, b, c and d?

Here is a pattern made from bricks:
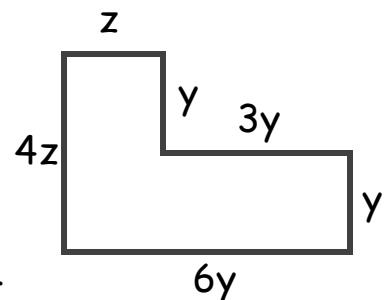
Pattern 1   Pattern 2   Pattern 3

a) What is the nth term?

b) Which pattern will have 49 bricks?

SIMPLIFY:

A) $(3P^4)^2$

B) P^{-2}

a) Express the perimeter in terms of y and z.

b) If the perimeter is 21cm. Find the value of z when y = 1.

z

y

3y

4z

y

6y

Two alarms go off at 6:50am. One rings every 4 minutes and the other rings every 6 minutes. When will they both ring at the same time?
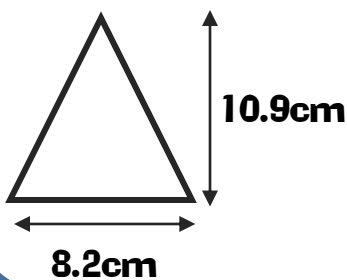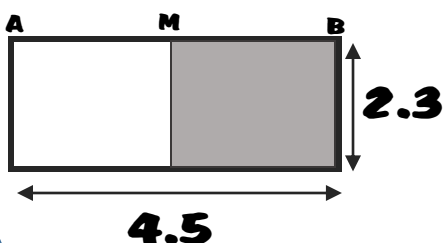
Expand:

a) $(3y + 4)^2$

Factorise:

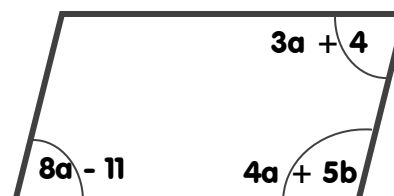b) $(18b^2 + 15b)$

Estimate the area of the following triangle.

10.9cm

8.2cm

Solve: $14x - 5 = 6x - 1$

Calculate the area of the shaded section. M is the midpoint of line AB.

A   M   B

2.3

4.5
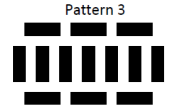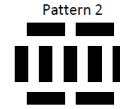
Find the value of a and b

3a + 4

8a - 11   4a + 5b

Top Ten Topics

Express 135 as a product of prime factors in the form $2^a \times 3^b \times 5^c \times 7^d$. What are the values a, b, c and d?
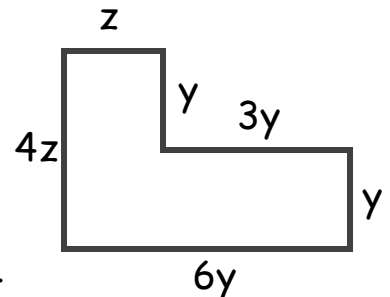

Here is a pattern made from bricks:

Pattern 1   Pattern 2   Pattern 3

a) What is the nth term?

b) Which pattern will have 49 bricks?

SIMPLIFY:

A) $(3P^4)^2$

B) P^{-2}

---

a) Express the perimeter in terms of y and z.

b) If the perimeter is 21cm. Find the value of z when y = 1.

z

y

3y

4z

y

6y

Two alarms go off at 6:50am. One rings every 4 minutes and the other rings every 6 minutes. When will they both ring at the same time?
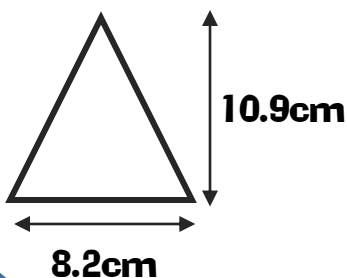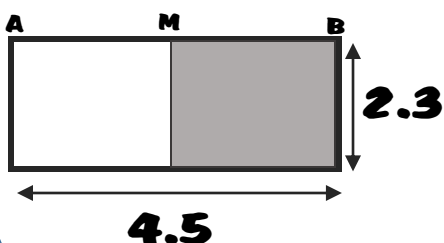

Expand:

a) $(3y + 4)^2$

Factorise:

b) $(18b^2 + 15b)$

Estimate the area of the following triangle.

10.9cm

8.2cm

Solve: $14x - 5 = 6x - 1$

Calculate the area of the shaded section. M is the midpoint of line AB.

A   M   B

2.3

4.5

Find the value of a and b

3a + 4

8a - 11   4a + 5b