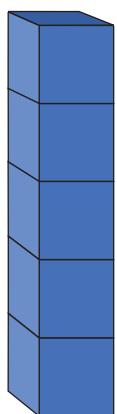


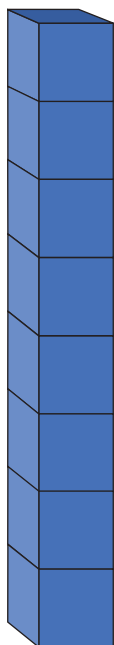
You are the Mobile Maintenance Company.

1. Work out the exposed surface area of each tower below. Give the surface area in number of faces.

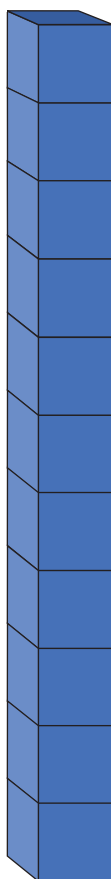
Show your working using equations.



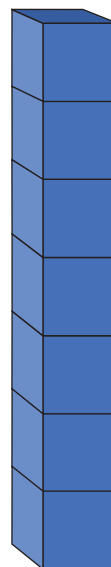
Height = 5



Height = 8



Height = 11



Height = 7



Height = 3

2. Draw cube buildings that match the exposed surface area given.

Exposed surface area = 9 faces

Exposed surface area = 21 faces

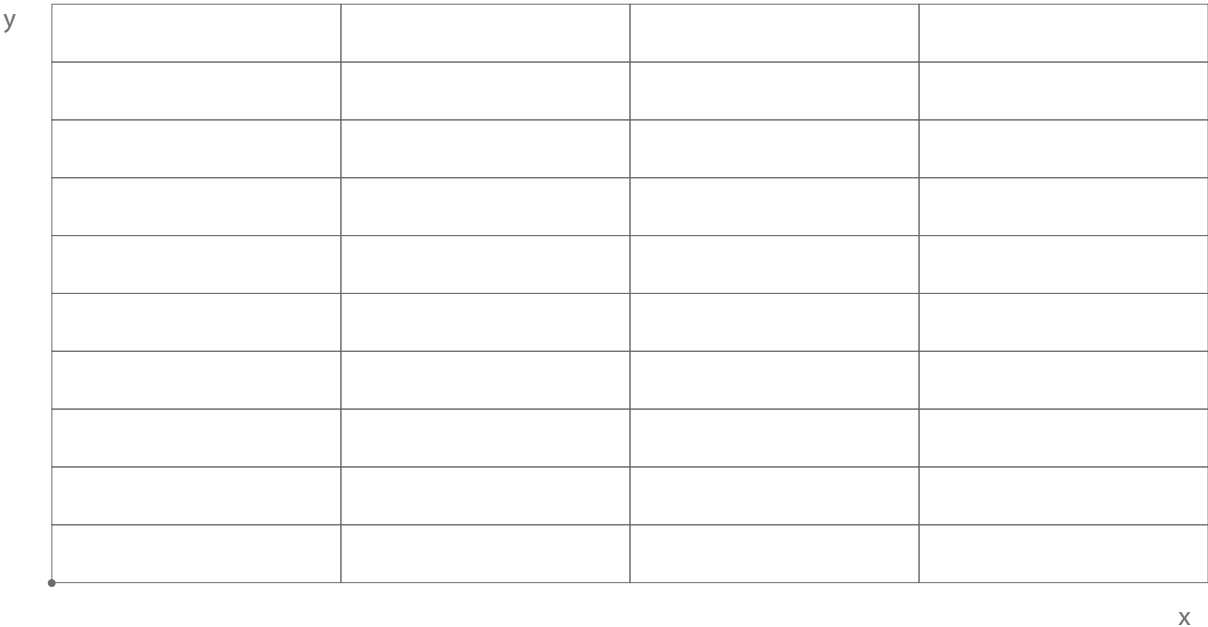
Exposed surface area = 41 faces

3. Complete this table showing numbers of storeys of the tower, and the number of exposed faces that need to be painted.

Number of storeys (n)	1	2	3	4	5	6	7	8	9	10
Number of faces (f)										

4. Graph the relationship between number of storeys and number of faces using the grid below.

Relationship between height of the tower and number of faces



5. Predict the number of faces for these towers:

20 Storeys

50 Storeys

100 Storeys