

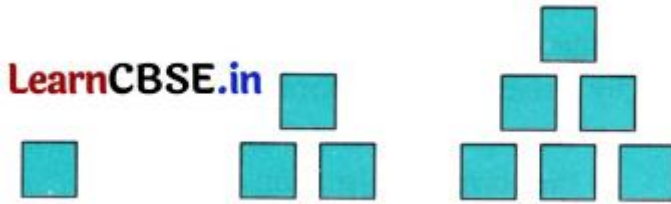
**BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA.**  
**CLASS – VI (MATHEMATICS)**  
**ASSIGNMENT**  
**CHAPTER 1 : PATTERNS IN MATHEMATICS**  
**CHAPTER 7 : FRACTIONS**

SECTION-A (MULTIPLE CHOICE QUESTIONS)	
1	<p>If <math>\frac{11}{4} = \frac{77}{x}</math>, then x =</p> <p>(a) 28    (b) 40    (c) 44    (d) 30</p>
2	<p>The sequence 1, 3, 6, 10, 15,... is called as</p> <p>(a)Squares    (b)Counting Numbers  (c)Triangular Numbers    (d)Odd Numbers</p>
3	<p>Assertion (A) : Assertion (A): <math>\frac{5}{2}</math> is greater than 1.</p> <p>Reason (R): If the numerator of a fraction is greater than the denominator, the fraction is greater than 1.</p> <p>(a)Both A and R are true and R is the correct explanation of A.  (b)Both A and R are true but R is not the correct explanation of A.  (c) A is true but R is false.  (d)A is false but R is true.</p>
SECTION-B (2 MARKS QUESTIONS)	
4	<p>a.Find the simplest form of <math>\frac{42}{75}</math></p> <p>b.Compare: <math>\frac{8}{5}</math> — <math>\frac{8}{7}</math></p>
5	<p>Show the square number 64 using dots.</p>
SECTION – C (3 MARKS QUESTIONS)	
6	<p>Identify the patterns and write the next three numbers to complete the given patterns.</p> <p>(a)1, 3, 6, 10, 15, ....., ....., .....</p> <p>(b)1, 2, 3, 5, 8, ..., ....., .....</p> <p>(c) 1, 8, 27, 64, 125, ....., ....., .....</p>
7	<p>A bulldozer weighed <math>3\frac{2}{5}</math> tons. If it scooped up <math>5\frac{5}{8}</math> tons of sand, what would be the combined weight of the bulldozer and the sand?</p>
SECTION – D (5 MARKS QUESTIONS)	
8	<p>Represent first 5 hexagonal numbers pictorially.</p>
9	<p>a) Arrange in descending order using the symbol &gt;:</p> <p style="text-align: center;"><math>\frac{8}{17}</math> <math>\frac{8}{9}</math> <math>\frac{8}{5}</math> <math>\frac{8}{13}</math></p> <p>b) Shikha painted <math>\frac{1}{5}</math> of the wall space in her room. Her brother Ravish helped and painted <math>\frac{3}{5}</math> of the wall space. How much did they paint together? How much the room is left unpainted?</p>

SECTION - E ( CASE STUDY)

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Rima and Diva are playing with square counters.  
Rima arranges her counters as follows:



Diva arranges the counters as follows:



One of their friends, Rohan, says these are showing the number patterns.  
Based on the above information, answer the following questions.

- What are the number patterns they are showing?
- If Rima's arrangement is representing the triangular numbers, then what will be her next two arrangements if she follows the same pattern?
- What is Diva's next arrangement with counters if she follows the same pattern?