

Test Taken



School Name: EI School

City: Ahmedabad

CLASS	SECTION	EXAM CODE
6	B	8709

No. of test takers: **25**

6.5

Average

1.5 - 9.0

Range

(Scores are scaled to 10)

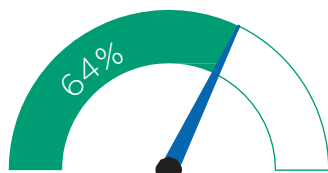


Score Gauge

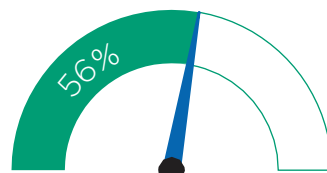
This section shows the overall score of students, and how they have performed on questions testing Procedure/Knowledge and Understanding/Application. The overall score is rounded to the nearest 0.5.



Overall Score



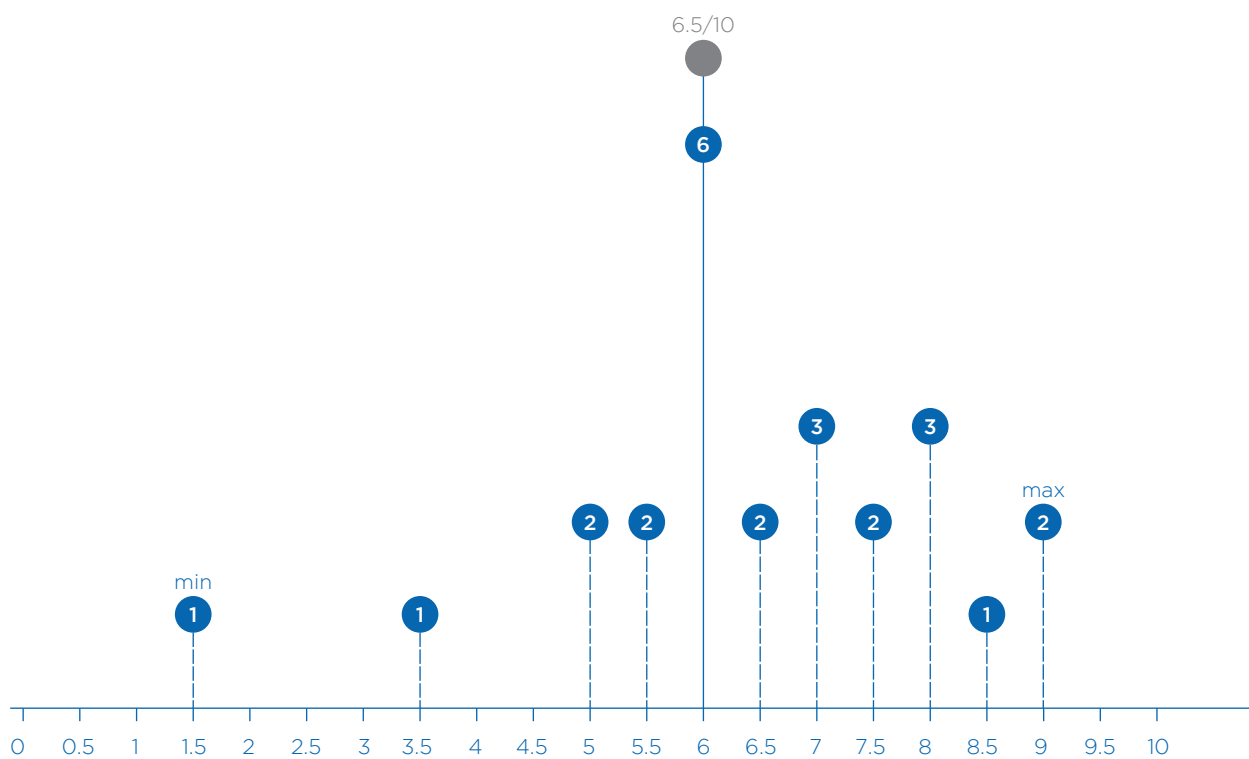
Procedure/Knowledge



Understanding/Application

Score Distribution Chart

This section shows the distribution of the student scores (rounded to the nearest 0.5) for the test.



- min ● Minimum Score max ● Maximum Score ● Section Average Score
- ① The number inside each circle indicates the number of students obtaining that score



C-R-O Chart

This section categorises questions as Critical, Recommended and Optional. These are priority levels assigned to questions that need to be revisited to explain the concepts behind them.



Discussion Priority	Count	Q.No.
■ Critical Must revisit without exception	07	1, 4, 7, 10, 19, 20, 23
■ Recommended Important to revisit, but lower priority than 'Critical'	08	5, 6, 9, 11, 12, 15, 16, 18
■ Optional Optional to revisit	10	All other questions

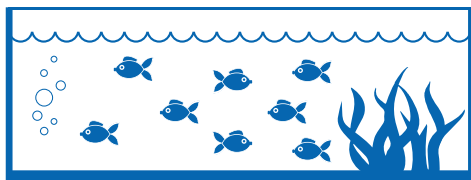
Question numbers are as per version 1

Remediation Support

Out of the critical and the recommended questions identified above, here are some remediation ideas developed by EI's subject specialists. Question numbers are based on paper version 1.

1

What fraction of the fish in the aquarium are moving towards the weeds?



- ① Half
- ③ Three Quarters
- ② Quarter
- ④ One Third

Critical | Correct Answer: 2

Option 1 19%	Option 2 11%	Option 3 23%	Option 4 47%
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Distractor Explanation:

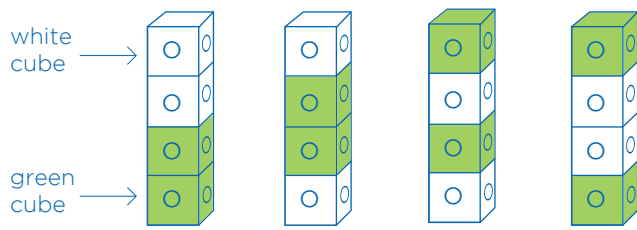
Students are expected to see that only one pair of fish out of 4 pairs are swimming towards the weeds.

Students answering option 4, don't understand that a fraction represents a 'part' of the 'whole'. They seem to think that the number of fish swimming towards the weeds corresponds to the numerator and that swimming opposite (6 of them) corresponds to the denominator. Students who answer options 1 or 3 may be making a random guess.

Remedial Measure:

Students at this level, in general, are more comfortable with 'half'. So it would be better to start with half, then move on to $\frac{1}{4}$ and other fractions. The following activity will help students to group objects appropriately and identify the fraction of objects in a collection.

Give each student, or a group of students multi-link cubes of 2 different colours. Ask them to make a tower of 4 cubes such that half the cubes in the tower are of the same colour. Ask them to justify that their towers have half the cubes of the same colour. Make towers of 4 cubes as shown below and ask them what fraction of the cubes in the tower are green.



Let them notice the rearrangement of cubes done by you to make other towers. Help them see each of these towers have half the cubes green. You may also put cubes in a row forming a block and help them identify 'half'. In this way lead them to conclude that the position of cubes in the tower or arrangement of cubes in a row, don't matter. In each of these cases, half the cubes in the collection are of the same colour.

By this activity students will be able to see that cubes of the same colour is not necessarily be together in the tower. Ask students to make towers with $\frac{1}{4}$ of the cubes of the same colour by giving them cubes of 2 or more different colours and thus help them consolidate their learning.

4 Between which of these pairs of whole numbers does $\frac{43}{41}$ lie?

- ① between 0 and 1
- ② between 1 and 2
- ③ between 41 and 43
- ④ between 43 and 84

Critical Correct Answer: 2			
Option 1	Option 2	Option 3	Option 4
8%	36%	46%	10%

Distractor Explanation:

To answer this question correctly, students should understand the concept of improper fractions and they should be able to convert improper fraction to mixed fraction. Students who have chosen option 2 correctly understood that $\frac{43}{41} = 1\frac{2}{41}$, which lies between 1 and 2.

Students who have chosen option 1 appear to have some sense of the concept, however, they possibly feel that all fractions refer to a value of less than 1. Students also possibly see a fraction as two separate numbers, rather than as a form of representing a single number. This is evident from the significant proportion of students who have chosen option 3.

Remedial Measures:

Diagrams may be used to help students visually understand this concept. Beginning with simple improper fractions, demonstrate how these can be changed into the form of a mixed fraction.

Ask them what fractional number they would use to represent one and a half pizzas, or two and a quarter kg of rice, etc. Help them see that $1\frac{1}{2}$ means $1 + \frac{1}{2}$ and therefore is a number between 1 and 2. Help students represent different mixed fractions on a number line. Make them aware of why $\frac{3}{2}$ is the same as $1\frac{1}{2}$. Diagrams such as the one shown below may be used



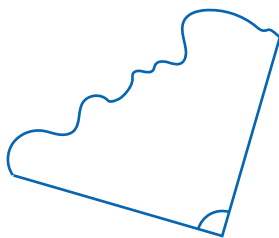
Thus, help them realise that $\frac{43}{41}$ can also be written $1 + \frac{2}{41}$ and that this number will therefore lie between 1 and 2.



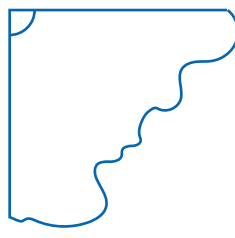
18 A torn paper has a corner as right angle.



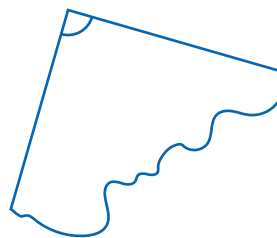
It is turned around in positions as shown below.



Position 1



Position 2



Position 3

In which of these positions is the angle marked a right angle?

- ① only Position 2
- ② only Positions 1 and 2
- ③ all - Positions 1, 2 and 3
- ④ none of the Positions 1, 2 or 3

Recommended Correct Answer: 3			
Option 1	Option 2	Option 3	Option 4
28%	17%	34%	21%

Distractor Explanation:

Students who have selected option 3 know that turning the paper to different positions will not change the angle marked so in all the positions, the marked angle will remain to be a right angle. Students who have selected option 1 are able to identify a right angle only when one of its arms is horizontal and the other vertical. Students who have answered option 2 are not able to identify a right angle in non standard orientations. Students who have answered option 4 may have felt that the angle changes when the paper is turned.

Remedial Measure:

Help students understand angle as an amount of turn - by how much should one arm be rotated so that it coincides with the other. Help them understand that this does not change when the figure as a whole is rotated.

Ask them to spot out the right angles around them - in the corner of a room, or the angle between the edges of a book etc. Let them make a paper cut out of the letter L and actually place it along these right angles to see if it fits. Slowly they can go on to making a mental comparison with the letter L to decide if an angle is a right angle.

Make sure that you expose them to right angles in all orientations, so that they don't form fixed mental images like a right angle has one arm horizontal and another vertical.



Topic-wise Performance

This section indicates students performance on each of the topics tested.

Topic	Performance
Basic Understanding of Mixed and Improper Fractions	41%
Comparison and ordering of Mixed and Improper Fractions	42%
☞ Operations on Fractions	62%
Basic Understanding of an Angle	56%
Classifying Angles	55%

☞ Best Performing Topic

! Topic Recommended for Remediation

Response Distribution

This section shows the responses provided by the students for each question. We have highlighted the correct answer in green. The question numbers in the table below are based on paper version 1.

Topic	Q. No.	Option 1	Option 2	Option 3	Option 4	Skipped	Priority	Type
Basic Understanding of Mixed and Improper Fractions	1	19%	11%	23%	47%	0%	C	U
	2	13%	3%	8%	76%	0%	O	U
	3	6%	19%	8%	67%	0%	O	U
	4	8%	36%	46%	10%	0%	C	U
	5	46%	43%	3%	6%	2%	R	U
	6	3%	6%	59%	32%	0%	R	P
Comparison and ordering of Mixed and Improper Fractions	7	25%	14%	22%	39%	0%	C	U
	8	8%	11%	12%	68%	0%	O	U
	9	57%	8%	14%	21%	0%	R	U
	10	6%	0%	67%	28%	0%	C	P
Operations on Fractions	11	8%	56%	25%	11%	0%	R	P
	12	6%	58%	31%	6%	0%	R	U
	13	14%	81%	3%	3%	0%	O	U
	14	22%	6%	19%	53%	0%	O	P
Basic Understanding of an Angle	15	3%	24%	55%	16%	3%	R	P
	16	13%	24%	53%	0%	0%	R	U
	17	8%	83%	3%	6%	0%	O	U
	18	28%	17%	34%	21%	0%	R	U
Classifying Angles	19	11%	50%	6%	33%	0%	C	P
	20	17%	11%	42%	31%	0%	C	U
	21	19%	81%	0%	0%	0%	O	U
	22	8%	14%	6%	72%	0%	O	U
	23	53%	6%	36%	6%	0%	C	U
	24	42%	14%	14%	31%	0%	R	U
	25	1%	3%	93%	3%	0%	O	U

Priority: C - Critical, R - Recommended, O - Optional

Type: P - Procedure/Knowledge U - Understanding/Application



Class Scorecard

This section shows the individual performances of students in the test in the descending order of their performance.

Sl. No.	Roll No.	Student Name	Correct (out of 25)	Score	
1	18	Nishchal Shukla	23	9.0	⊞
2	23	Snigdha Serikari	23	9.0	⊞
3	13	Karn J	21	8.5	⊞
4	9	Dipti Lal	20	8.0	
5	10	Divya S	20	8.0	
6	11	Haripriya Valayaputtur	20	8.0	
7	7	David Athaide	19	7.5	
8	8	Diana	19	7.5	
9	15	Manoj M	18	7.0	
10	16	Nakul Rajagopal	18	7.0	
11	17	Neha Kaktan	18	7.0	
12	20	Rajendra Soyantar	16	6.5	
13	21	Simon Talreja	16	6.5	
14	1	Aniruddh Sastry	15	6.0	
15	2	Ankit K	15	6.0	
16	12	K C Siddharth	15	6.0	
17	14	Mallikharjuna Simha	15	6.0	
18	24	Sudhir G	15	6.0	
19	25	Swati Jha	15	6.0	
20	3	Anuja K	14	5.5	
21	6	Binny Alexander	14	5.5	
22	4	Archana K	13	5.0	
23	5	Arti Palnitkar	13	5.0	
24	22	Sinjita Basu	9	3.5	!
25	19	Praveena K	4	1.5	!

! (Scores are rounded off to the nearest 0.5)

Ab - Absent/did not attempt

⊞ >80%

! <50%



Answer Key

The table below gives the correct answer for each question in this test across all paper versions used.

Q.No	Correct Answer			
	Version 1	Version 2	Version 3	Version 4
1	2	3	3	3
2	4	3	1	1
3	4	3	3	2
4	2	1	3	4
5	2	4	3	4
6	4	2	4	2
7	2	3	3	2
8	4	1	3	3
9	1	3	4	1
10	4	3	2	3
11	2	2	4	3
12	2	2	1	1
13	2	1	3	3
14	4	4	2	3
15	3	3	1	1
16	3	3	1	3
17	2	4	4	4
18	3	4	3	1
19	4	2	4	3
20	4	3	3	2
21	2	4	2	3
22	4	1	2	4
23	3	3	3	4
24	1	1	1	3
25	3	2	4	1