

EXERCISES ON FRACTIONS AND DECIMALS

Multiple-Choice Questions

1. A French class has 12 boys and 18 girls. Boys are what fraction of the class?
(A) $\frac{2}{5}$
(B) $\frac{3}{5}$
(C) $\frac{2}{3}$
(D) $\frac{3}{4}$
2. For how many integers, a , between 30 and 40 is it true that $\frac{5}{a}$, $\frac{8}{a}$, and $\frac{13}{a}$ are all in lowest terms?
(A) 1
(B) 2
(C) 3
(D) 4
3. $\frac{1}{4}$ is the average (arithmetic mean) of $\frac{1}{5}$ and what number?
(A) $\frac{1}{20}$
(B) $\frac{3}{10}$
(C) $\frac{1}{3}$
(D) $\frac{9}{20}$
4. If $\frac{3}{11}$ of a number is 22, what is $\frac{6}{11}$ of that number?
(A) 11
(B) 12
(C) 33
(D) 44
5. What fractional part of a week is 98 hours?
(A) $\frac{24}{98}$
(B) $\frac{1}{2}$
(C) $\frac{4}{7}$
(D) $\frac{7}{12}$
6. $\frac{5}{8}$ of 24 is equal to $\frac{15}{7}$ of what number?
(A) 7
(B) 15
(C) $\frac{7}{225}$
(D) $\frac{225}{7}$
7. Which of the following is less than $\frac{5}{9}$?
(A) $\frac{5}{8}$
(B) $\frac{21}{36}$
(C) $\frac{25}{45}$
(D) $\frac{55}{100}$
8. Which of the following is (are) greater than x when $x = \frac{9}{11}$?
I. $\frac{1}{x}$
II. $\frac{x+1}{x}$
III. $\frac{x+1}{x-1}$
(A) I only
(B) II only
(C) I and II only
(D) I, II, and III

9. Which of the following statements is true?

- (A) $\frac{3}{8} < \frac{4}{11} < \frac{5}{13}$
 (B) $\frac{4}{11} < \frac{3}{8} < \frac{5}{13}$
 (C) $\frac{5}{13} < \frac{4}{11} < \frac{3}{8}$
 (D) $\frac{4}{11} < \frac{5}{13} < \frac{3}{8}$

10. If $a = 0.99$, which of the following is (are) less than a ?

- I. \sqrt{a}
 II. a^2
 III. $\frac{1}{a}$

- (A) None
 (B) I only
 (C) II only
 (D) III only

11. For the final step in a calculation, Paul accidentally divided by 1000 instead of multiplying by 1000. What should he do to his answer to correct it?

- (A) Multiply it by 1000.
 (B) Multiply it by 100,000.
 (C) Multiply it by 1,000,000.
 (D) Square it.

Grid-in Questions

12. One day at Central High

School, $\frac{1}{12}$ of the students

were absent, and $\frac{1}{5}$ of

those present went on a field trip. If the number of students staying in school was 704, how many students are enrolled at Central High?

•	•	•	•
1	0	0	0
2	1	1	1
3	2	2	2
4	3	3	3
5	4	4	4
6	5	5	5
7	6	6	6
8	7	7	7
9	8	8	8
	9	9	9

13. What is a possible value of

$$x \text{ if } \frac{3}{5} < \frac{1}{x} < \frac{7}{9}?$$

•	•	•	•
1	0	0	0
2	1	1	1
3	2	2	2
4	3	3	3
5	4	4	4
6	5	5	5
7	6	6	6
8	7	7	7
9	8	8	8
	9	9	9

14. If $7a = 3$ and $3b = 7$, what is the value of $\frac{a}{b}$?

•	•	•	•
1	0	0	0
2	1	1	1
3	2	2	2
4	3	3	3
5	4	4	4
6	5	5	5
7	6	6	6
8	7	7	7
9	8	8	8
	9	9	9

15. If $A = \{1, 2, 3\}$, $B = \{2, 3, 4\}$, and C is the set consisting of all the fractions whose numerators are in A and whose denominators are in B , what is the product of all of the numbers in C ?

•	•	•	•
1	0	0	0
2	1	1	1
3	2	2	2
4	3	3	3
5	4	4	4
6	5	5	5
7	6	6	6
8	7	7	7
9	8	8	8
	9	9	9