

1. What part of 200 is 59?
(A) 295 (B) 2.95 (C) 9.8 (D) 29.5 (E) 98
2. How many thirds are there in $\frac{3}{4}$?
(A) 2 (B) $2\frac{1}{4}$ (C) 3 (D) $3\frac{1}{4}$ (E) 4
3. What part of x is y ?
(A) xy (B) $\frac{x}{y}$ (C) $\frac{1}{xy}$ (D) $\frac{y}{x}$ (E) $\frac{x}{100y}$
4. Which of the following has the smallest value?
(A) $\frac{5}{8}$ (B) $\frac{7}{12}$ (C) $\frac{8}{13}$ (D) $\frac{11}{20}$ (E) $\frac{18}{37}$
5. $\frac{1}{3}$ of $\frac{2}{9}$ equals 2 multiplied by
(A) $\frac{1}{27}$ (B) $\frac{2}{27}$ (C) 3 (D) $13\frac{1}{2}$ (E) 27
6. Which of the following has the smallest value?
(A) $\frac{1}{2}$ (B) $\frac{1}{3}$ (C) $\frac{1}{4}$ (D) $\frac{1}{5}$ (E) $\frac{1}{6}$
7. A man who owns $\frac{5}{6}$ of a parcel of property sells $\frac{4}{5}$ of his share for \$48,000. At that value the entire property is worth
(A) \$64,800 (B) \$69,200 (C) \$72,000 (D) \$73,600 (E) \$84,000
8. On a two-day hike, 8 campers equally share 4 loaves of bread. If there are 16 slices of bread in each loaf, how many slices of bread does each camper receive daily?
(A) 1 (B) 2 (C) 3 (D) 4 (E) 8
9. When 10 gallons are removed from a tank which is $\frac{5}{8}$ full, the tank is completely emptied. How many gallons are now needed to fill this tank?
(A) 2 (B) 4 (C) 8 (D) 16 (E) 18
10. A group consists of 22 girls and 18 boys. What part of the group is composed of boys?
(A) $\frac{9}{11}$ (B) $\frac{9}{22}$ (C) $\frac{19}{28}$ (D) $\frac{9}{13}$ (E) $\frac{9}{20}$
11. The number which when increased by $\frac{1}{3}$ of itself equals 96 is
(A) 32 (B) 48 (C) 72 (D) 84 (E) 128
12. Joan is three years younger than Martin. How old will Joan be when she is $\frac{4}{5}$ his age?
(A) 4 (B) 8 (C) 9 (D) 10 (E) 12
13. A gasoline gauge registers $\frac{1}{8}$ full. After purchasing 12 gallons of gasoline it registers $\frac{7}{8}$ full. What is the capacity of the tank (in gallons)?
(A) 13 (B) 14 (C) 16 (D) 17 (E) 18
14. In a recent civil service examination, $\frac{1}{8}$ of the candidates failed the first part of the test. Of those eligible to take the second part of the competitive examination, $\frac{2}{7}$ successfully passed. What part of the original candidates were successful in the examination?
(A) $\frac{1}{28}$ (B) $\frac{9}{56}$ (C) $\frac{1}{5}$ (D) $\frac{1}{4}$ (E) $\frac{3}{4}$
15. After 75 gallons of oil are removed from a cylindrical tank, its level is lowered from $\frac{1}{6}$ to $\frac{1}{7}$ of its capacity. How many gallons should now be added to the tank to fill it?
(A) 2625 (B) 2700 (C) 2775 (D) 3075 (E) 3150
16. Jonathan has $\frac{1}{3}$ as many green marbles as he has red marbles and $\frac{1}{6}$ as many red marbles as he has yellow marbles. What part of his collection is made up of yellow marbles?
(A) $\frac{9}{11}$ (B) $\frac{1}{6}$ (C) $\frac{2}{11}$ (D) $\frac{3}{22}$ (E) $\frac{1}{22}$
17. If a 15-gallon gasoline tank is $\frac{3}{8}$ full, how many gallons must be added to completely fill the tank?
(A) 5 (B) $5\frac{5}{8}$ (C) 9 (D) $9\frac{3}{8}$ (E) 10
18. Three chapters of a fraternity voted on a constitutional amendment. In Chapter A it passed with $\frac{3}{4}$ of the members in favor of it. In Chapter B only 2 out of 9 members were against it. Chapter C passed the proposition with 5 of its 36 members voting against it. Arrange the chapters in decreasing order according to the proportion in favor of the amendment.
(A) C,B,A (B) A,B,C (C) A,C,B (D) B,A,C (E) B,C,A
19. The annual income of a family is budgeted as follows: $\frac{1}{10}$ is for clothing, $\frac{1}{3}$ is for food and $\frac{1}{5}$ is for rent. This leaves \$1320 for other expenses and savings. Find the annual income.
(A) \$2156 (B) \$3600 (C) \$23,760 (D) \$36,000 (E) \$39,600
20. J. C. Nichols department store reports that the average sales on Saturdays is twice that on Thursdays and the average sales on Thursdays is twice that on the other four days. What fraction of the weekly sales are made on Thursdays?
(A) $\frac{1}{7}$ (B) $\frac{1}{3}$ (C) $\frac{2}{7}$ (D) $\frac{1}{3}$ (E) $\frac{2}{3}$

1. A 3. D 5. A 7. C 9. D
2. B 4. E 6. A 8. D 10. E

11. C 13. C 15. B 17. D 19. B
12. E 14. D 16. A 18. A 20. B