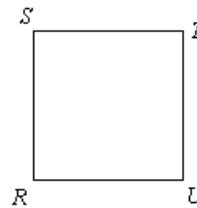


Sample Questions and Answers:

- Which of the following is equal to 85 percent of 160?
 - 1.88
 - 13.6
 - 136
 - 188
 - 13,600
- The regular hourly wage for an employee of a certain factory is \$5.60. If the employee worked 8 hours overtime and earned $1\frac{1}{2}$ times this regular hourly wage for overtime, how much overtime money was earned?
 - \$67.20
 - \$55.40
 - \$50.00
 - \$44.80

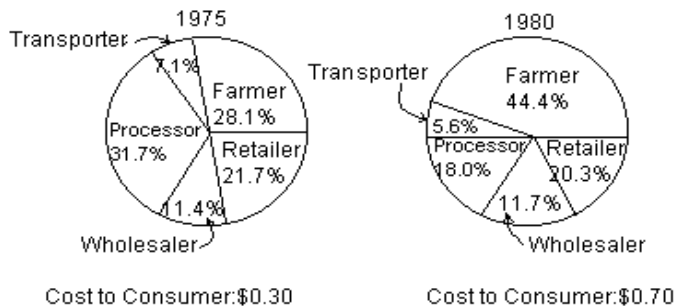
(E) \$12.00



- Square $RSTU$ shown above is rotated in a plane about its center in a clockwise direction the minimum number of degrees necessary for T to be in the position where S is now shown. The number of degrees through which $RSTU$ is rotated is
 - 135°
 - 180°
 - 225°
 - 270°
 - 315°

Questions 4-5 refer to the following graphs.

BREAKDOWN OF COST TO CONSUMER FOR THE PRODUCTION OF 6 OUNCES OF FROZEN ORANGE JUICE



4. Of the following, which is closest to the increase from 1975 to 1980 in the amount received by the processor in producing 6 ounces of frozen orange juice?

- (A) \$0.03
- (B) \$0.05
- (C) \$0.06
- (D) \$0.08
- (E) \$0.13

5. In 1980, approximately what fraction of the cost to the consumer for the production of 6 ounces of frozen orange juice went to the farmer?

- (A) $\frac{3}{11}$
- (B) $\frac{1}{3}$
- (C) $\frac{4}{9}$
- (D) $\frac{5}{9}$
- (E) $\frac{3}{5}$

6. $\sqrt[4]{496}$ is between

- (A) 3 and 4
- (B) 4 and 5
- (C) 5 and 6
- (D) 6 and 7
- (E) 7 and 8

7. If $x \neq 0$, $2x = 5y$, and $3z = 7x$, what is the ratio of z to y ?

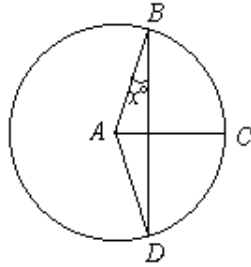
- (A) 2 to 21
- (B) 3 to 5
- (C) 14 to 15
- (D) 6 to 5
- (E) 35 to 6

8. A grocer purchased a quantity of bananas at 3 pounds for \$0.50 and sold the entire quantity at 4 pounds for \$1.00. How many pounds did the grocer purchase if the profit from selling the bananas was \$10.00?

- (A) 40
- (B) 60
- (C) 90
- (D) 120
- (E) 240

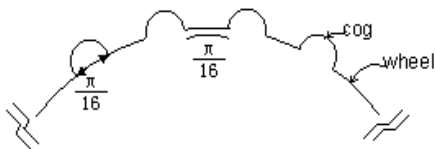
9. There are between 100 and 110 cards in a collection of cards. If they are counted out 3 at a time, there are 2 left over, but if they are counted out 4 at a time, there is 1 left over. How many cards are in the collection?

- (A) 101
- (B) 103
- (C) 106
- (D) 107
- (E) 109



Note: Figure not drawn to scale.

10. If A is the center of the circle shown above and $AB=BC=CD$, what is the value of x ?
- (A) 15
 (B) 30
 (C) 45
 (D) 60
 (E) 75
11. Out of a total of 1,000 employees at a certain corporation, 52 percent are female and 40 percent of these females work in research. If 60 percent of the total number of employees work in research, how many male employees do NOT work in research?
- (A) 520
 (B) 480
 (C) 392
 (D) 208
 (E) 88
12. An instructor scored a student's test of 50 questions by subtracting 2 times the number of incorrect answers from the number of correct answers. If the student answered all of the questions and received a score of 38, how many questions did that student answer correctly?
- (A) 19
 (B) 38
 (C) 41
 (D) 44
 (E) 46
13. Which of the following integers does NOT have a divisor greater than 1 that is the square of an integer?
- (A) 75
 (B) 42
 (C) 32
 (D) 25
 (E) 12



14. There are cogs around the circumference of a wheel and each cog is $\frac{\pi}{16}$ centimeter wide with a space of

$\frac{\pi}{16}$ centimeter between consecutive cogs, as shown above. How many cogs of this size, with the same space between any two consecutive cogs, fit on a wheel with diameter 6 centimeters?

- (A) 96
- (B) 64
- (C) 48
- (D) 32
- (E) 24

15. If $r \odot s = rs + r + s$, then for what value of s is $r \odot s$ equal to r for all values of r ?

- (A) -1
- (B) 0
- (C) 1
- (D) $\frac{1}{r+1}$
- (E) r

16. In each production lot for a certain toy, 25 percent of the toys are red and 75 percent of the toys are blue. Half the toys are size A and half are size B . If 10 out of a lot of 100 toys are red and size A , how many of the toys are blue and size B ?

- (A) 15
- (B) 25
- (C) 30
- (D) 35
- (E) 40

17. If $2x + 5y = 8$ and $3x = 2y$, what is the value of $2x + y$?

- (A) 4
- (B) $\frac{70}{19}$
- (C) $\frac{64}{19}$
- (D) $\frac{56}{19}$
- (E) $\frac{40}{19}$

18. A ladder 25 feet long is leaning against a wall that is perpendicular to level ground. The bottom of the ladder is 7 feet from the base of the wall. If the top of the ladder slips down 4 feet, how many feet will the bottom of the ladder slip?

- (A) 4
- (B) 5
- (C) 8
- (D) 9
- (E) 15

19. What is the least possible product of 4 different integers, each of which has a value between -5 and 10, inclusive?

- (A) -5040
- (B) -3600
- (C) -720
- (D) -600
- (E) -120

20. If a motorist had driven 1 hour longer on a certain day and at an average rate of 5 miles per hour faster, he would have covered 70 more miles than he actually did. How many more miles would he have covered than he actually did if he had driven 2 hours longer and at an average rate of 10 miles per hour faster on

that day?

(A) 100
(D) 150

(B) 120
(E) 160

(C) 140

Answers:

1. C
2. A
3. D
4. A
5. C
6. B
7. E
8. D
9. A
10. B
11. E
12. E
13. B
14. C
15. B
16. D
17. D
18. C
19. B
20. D

www.Examrace.com