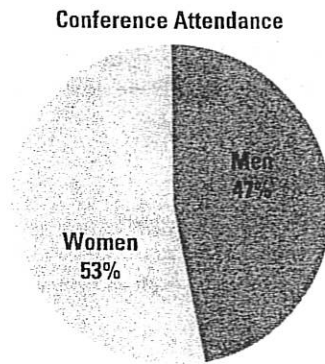


# Subtest 1: Arithmetic Reasoning

TIME: 36 minutes for 30 questions

DIRECTIONS: This test contains questions about arithmetic. Each question is followed by four possible answers. Decide which answer is correct and then mark the space on your answer sheet that has the same number and letter as your choice. Use scratch paper for any figuring you need to do. Calculators are not allowed.

1. Mike has \$5.25 in quarters and dimes. He has exactly 15 dimes. How many quarters does he have?  
(A) 6  
(B) 12  
(C) 15  
(D) 21
2. Kelly used to pay \$500 a month for rent. Now she pays \$525 a month for rent. By what percent did her rent increase?  
(A) 0.5 percent  
(B) 5 percent  
(C) 10 percent  
(D) 12.5 percent
3. A bag has 8 pennies, 5 dimes, and 7 nickels. A coin is randomly chosen from the bag. What is the probability that the coin chosen is a dime?  
(A)  $\frac{1}{20}$   
(B)  $\frac{1}{4}$   
(C)  $\frac{1}{3}$   
(D)  $\frac{3}{10}$
4. There are 2 pints in 1 quart and 4 quarts in a gallon. How many pints are in 2 gallons?  
(A) 32 pints  
(B) 16 pints  
(C) 8 pints  
(D) 4 pints
5. Paul invests \$2,000 in an account that pays 4 percent annual interest. How much will he earn in interest in one year?  
(A) \$160  
(B) \$80  
(C) \$120  
(D) \$800
6. One mile is equal to 5,280 feet. Sergeant Jeffries walked 1.2 miles. How many feet did he walk?  
(A) 7,392 ft.  
(B) 1,056 ft.  
(C) 5,780 ft.  
(D) 6,336 ft.
7. A total of 200 people attended a conference. Use the chart to determine how many attendees were women.



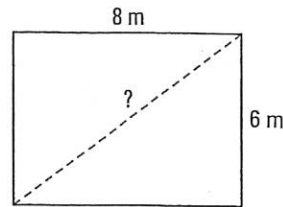
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- (A) 94
- (B) 212
- (C) 53
- (D) 106



8. Suppose you have \$88 in your checking account. You pay \$22 for a sweater and \$8 for lunch, and then you deposit a \$38 check. What is the balance in your account?
- (A) \$58  
(B) \$96  
(C) \$20  
(D) \$156
9. There are 24 right-handed students in a class of 30. A student is chosen from the class at random. What is the probability that the student is left-handed?
- (A)  $\frac{1}{2}$   
(B)  $\frac{1}{5}$   
(C)  $\frac{4}{5}$   
(D)  $\frac{1}{4}$
10. At a laundromat, it costs \$1.75 to wash each load of laundry and \$1.50 to dry each load of laundry. How much will you pay to wash and dry four loads of laundry?
- (A) \$2.25  
(B) \$20.00  
(C) \$20.25  
(D) \$13.00
11. Delia has been walking at a constant speed of 2.5 miles per hour for 12 minutes. How many miles has she walked?
- (A) 0.2 miles  
(B) 0.5 miles  
(C) 2 miles  
(D) 4.8 miles

12. A rectangular deck is 6 meters long and 8 meters wide. What is the distance from one corner of the deck to the opposite corner?



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- (A) 10 m  
(B) 12 m  
(C) 14 m  
(D) 15 m
13. Tom is going to hang three framed pictures side by side on a wall. How many different ways can he arrange the pictures?
- (A) 9  
(B) 5  
(C) 6  
(D) 27
14. A cleaning company charges by the square foot. The company charged \$600 to clean 4,800 square feet of space. How much would the company charge to clean 12,000 square feet of space?
- (A) \$950  
(B) \$1,200  
(C) \$1,400  
(D) \$1,500
15. Kendra earns \$12 an hour. Her employer pays 1.5 times her normal pay rate for overtime. Last week, she worked 40 hours plus 4 hours overtime. How much did she earn last week?
- (A) \$552  
(B) \$528  
(C) \$1,400  
(D) \$480

16. A hot tub is 75 percent full with 600 gallons of water. How many gallons of water are in the hot tub when it's half full?
- (A) 200 gallons  
(B) 400 gallons  
(C) 800 gallons  
(D) 300 gallons
17. Angela has 15 quarters and dimes in the cash register. The total value of the quarters and dimes is \$2.55. How many dimes are in the cash register?
- (A) 8 dimes  
(B) 7 dimes  
(C) 3 dimes  
(D) 10 dimes
18. A rectangular table top measures 48 inches long by 36 inches wide. A square game board that is 18 inches on each side is on the table top. Which amount of the table top's area is not covered by the game board?
- (A) 1,710 in.<sup>2</sup>  
(B) 1,404 in.<sup>2</sup>  
(C) 1,656 in.<sup>2</sup>  
(D) 96 in.<sup>2</sup>
19. A map of Texas has a scale of 1 cm = 11 km. The actual distance between Dallas and San Antonio is about 440 km. How far apart are the cities on the map?
- (A) 11 cm  
(B) 44 cm  
(C) 40 cm  
(D) 22 cm
20. Jake is four years older than Kenneth. Alicia is two years younger than Kenneth. The sum of Jake, Kenneth, and Alicia's ages is 38. What is Kenneth's age?
- (A) 9  
(B) 15  
(C) 12  
(D) 10
21. Mrs. Jacobs is making a large circular rug with a radius of 10 feet. Every square foot of material used to make the rug costs her \$0.50. Approximately how much will the material for the entire rug cost?
- (A) \$157  
(B) \$167  
(C) \$628  
(D) \$314
22. John's quiz scores in science class are 8, 6, 10, 7, 9, and 5. What is John's average quiz score?
- (A) 6  
(B) 8  
(C) 7.5  
(D) 8.5
23. Robert charges a flat fee of \$15 plus \$20 per half-hour to repair computers. He started one job at 8:45 a.m. and worked until he finished. The total charge for that job was \$75. What time did he finish the job?
- (A) 12:15 p.m.  
(B) 11:45 a.m.  
(C) 10:15 a.m.  
(D) 9:30 a.m.
24. The measure of angle  $P$  is  $44^\circ$ . Angle  $Q$  is  $12^\circ$  less than half the measure of the supplement of angle  $P$ . What is the measure of angle  $Q$ ?
- (A)  $136^\circ$   
(B)  $80^\circ$   
(C)  $68^\circ$   
(D)  $56^\circ$
25. Rose and Carla play on the same basketball team. During the last game, Rose scored  $\frac{3}{5}$  of the team's points. Carla scored 16 percent of the team's points. What percentage of the team's points were not scored by either Rose or Carla?
- (A) 76 percent  
(B) 66 percent  
(C) 24 percent  
(D) 34 percent



26. John and Garret are running in a marathon. John runs at a steady rate of 3.5 miles per hour, and Garret runs at a steady rate of 4.25 miles per hour. How far apart will they be 2 hours after the race starts?
- (A) 0.75 miles  
(B) 2.5 miles  
(C) 1.5 miles  
(D) 2.25 miles
27. Jim can repair a heating unit in 2 hours. Kyle can repair the same unit in 3 hours. How long will they take to repair the unit if they work together?
- (A) 1 hour and 10 minutes  
(B) 1 hour and 12 minutes  
(C) 48 minutes  
(D) 50 minutes
28. A square has an area of  $121 \text{ cm}^2$ . What is the perimeter?
- (A) 121 cm  
(B) 22 cm  
(C) 33 cm  
(D) 44 cm
29. How many gallons of water should you add to 4 gallons of a juice that is 20 percent water so the final mixture is 50 percent water?
- (A) 2.2 gallons  
(B) 2 gallons  
(C) 2.4 gallons  
(D) 1.4 gallons
30. David is at a car dealership trying to decide between buying a truck or a sedan. The truck is available in three colors, and the sedan is available in four colors. Each vehicle also has both a 2-wheel-drive and a 4-wheel-drive option in all available colors. How many different choices does he have?
- (A) 48  
(B) 14  
(C) 12  
(D) 6

DO NOT TURN THE PAGE UNTIL TOLD TO DO SO

**STOP**

DO NOT RETURN TO A PREVIOUS TEST