Problems Using Variables

1. Sarah and Lynne each have less than $1.00 in their pockets. If Sarah gives Lynne 100 they will each have the same amount. But, if Lynne gives Sarah 100 Sarah will have twice as much money as Lynne. How much money does Lynne have in her pocket?

A. 500

B. 600

C. 100

D. 700

E. Not Given

10. Jade’s family spends 17 cents out of every dollar they earn on transportation. They

earn $65,000. How much money do they have left for other expenses?

A. $53,950

B. $11,050

C. $48,000

D. $64,983

E. Not Given

12. Write an algebraic expression for the following problem. There are 24 cans of olives in a case. Jeremy stocked 3 cases and there were x cans already on the shelf. How many cans of olives were on the shelf when he finished stocking?

A. 24 x 3x

B. (3 x 24)

C. 24(3 + x)

D. 3(24 + x)

E. Not Given

15. What do you need to do to each side of this equation to solve it? N-5/8 = 2/3

A. Add 5/8

B. Subtract 5/8

C. Add 2/3

D. Subtract 2/3

E. Not Given

18. Solve for n. n/25 = 72/9

A. 216

B. 200

C. 300

D.86

E. Not Given

22. Peter, Joey, Carlos and Gerardo played miniature golf. Peter completed the west section in 35 minutes and the east section in 41 minutes. Joey finished the west section in 37 minutes and the east section in 42 minutes. Carlos finished the west section in 29 minutes and the east section in 45 minutes. Gerardo finished the entire course in one hour and 18 minutes. Which boy finished the whole course the fastest?

A. Peter

B. Joey

C. Carlos

D. Gerardo

E. Not Given

24. The Lees are planning to travel 918 miles on their vacation. They want to drive 2/3 of the distance on the first day. How many miles will they drive the first day?

A. 306 miles

B. 612 miles

C. 230 miles

D. 918 miles

E. Not Given

28. It takes Michael 37 minutes to ride his bike to school each day and 41 minutes to ride home. How many hours does he spend riding his bike to and from school in a 5-day week?

A. 2.5 hours

B. 6.5 hours

C. 3.4 hours

D. 3 hours

E. Not Given

29. Mrs. Tran’s class was getting ready to plant tomatoes. They were wondering if each package of tomato seeds contained the same number of seeds. They counted the seeds in four packages and found that there was an average of 73 seeds in the packages. The first three packages contained 78, 71, and 74 seeds, respectively. How many seeds were in the fourth package?

A. 73 seeds

B. 78 seeds

C. 64 seeds

D. 69 seeds

E. Not Given

31. Brian had $100. He bought 4 gifts. He paid $50 for the first gift. He paid half that for the second gift. The third gift cost half the price of the second gift, and the fourth gift was half the price of the third gift. How much money does he have left?

A. $93.75

B. $6.25

C. $56.25

D. $50.25

E. Not Given

42. Solve for n. n -7/10=2/6

A. 1 1/4

B. 11/30

C. 1 1/30

D. 2 1/3

E. Not Given

49. Miguel has a new job selling cars. He sold 4 cars in his first month on the job. In the second month he sold 8 cars. He sold 14 cars in the third month and 22 cars in the fourth month. If he continues to sell cars at this rate, how many months will it take him to sell 58 cars in a month, starting from his when he first started his new job?

A. 6 months

B. 7 months

C.10 months

D. 12 months

E. Not Given

50. Jordan, Bailey, Meredith, Taylor, and Sergio all went fishing. They each caught one fish. Use the clues below to figure out how long Taylor’s fish was.

• The mode of the lengths was 9 inches. This was also the median value of the five fish.

• The longest fish was 12 inches.

• The range of the lengths of fish was 7 inches. Sergio caught the smallest fish.

• Meredith and Bailey were the only ones to catch fish that were the same length.

• Jordan’s fish was 4 inches shorter than Taylor’s fish.

A. 4 inches

B. 8 inches

C. 10 inches

D. 12 inches

E. Not Given