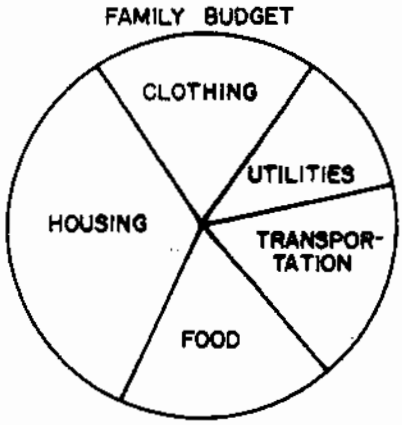
Part A

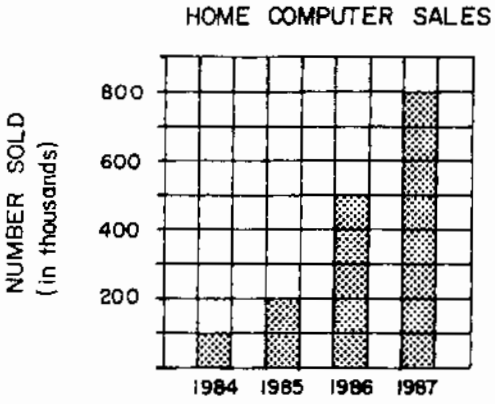
Answer all 20 questions in this part. Write your answers on the lines provided in PART A on the separate answer sheet. Use only a black lead pencil on the answer sheet.

1 The circle graph below shows the items in the Lee's family budget. Which item costs the family the greatest amount of money?



2 Find the sum of 31.4 and 56.2.

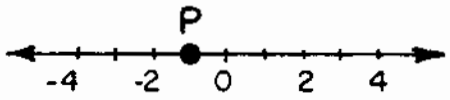
3 The bar graph below shows the number of home computer sales for each of four years. During which year were a total of exactly 500,000 home computers sold?



4 Add:

$$\begin{array}{r} 2472 \\ 798 \\ 26 \\ +\ 2314 \\ \hline \end{array}$$

5 What number is represented by point P on the number line below?



6 Colleen played in 20 basketball games and scored a total of 440 points. How many points did she average per game?

7 Write the numeral for sixty-three thousand twenty-nine.

8 Subtract 356 from 404.

9 Round 762 to the nearest hundred.

10 Multiply:

$$\begin{array}{r} 823 \\ \times\ 42 \\ \hline \end{array}$$

11 Each side of a square measures 3 centimeters. How many centimeters are in the perimeter of the square?

12 Multiply:
$$\begin{array}{r} 3.21 \\ \times\ 1.2 \\ \hline \end{array}$$

13 Divide 2432 by 64.

14 Divide: $2.16 \div 0.06$

15 A book weighs 1.25 kilograms. How many kilograms will 12 of these books weigh?

16 Solve for x: $3x - 3 = 12$

17 What is $\frac{3}{5}$ of 25?

18 Multiply: $(-12) \times (-4)$

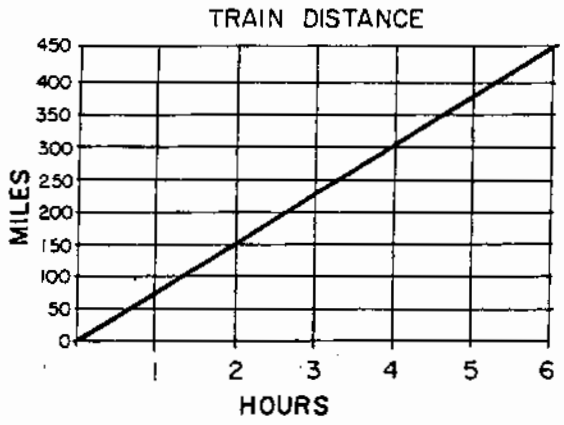
19 Add: $6 + (-8)$

20 What is 25% of 24?

Part B

Answer all 40 questions in this part. Mark your answers in the rows of answer circles provided in PART B on the separate answer sheet. Use only a black lead pencil on the answer sheet.

21 The graph below shows the distance traveled by a train over a 6-hour period. How long did the train take to travel 150 miles?



(a) 1 hour
(b) 2 hours
(c) 3 hours
(d) 4 hours

22 Which is the closest estimate of the product of 337 × 29?

(a) 600
(b) 900
(c) 6000
(d) 9000

23 What is the difference between \$47.93 and \$30.46?

(a) \$7.47
(b) \$17.47
(c) \$17.57
(d) \$78.39

24 Allen's bank account balance was \$35.00. He made a deposit of \$20.00 and then made a withdrawal of \$25.00. What amount is in Allen's account now?

(a) \$40.00
(b) \$35.00
(c) \$30.00
(d) \$10.00

25 Which is $\frac{27}{6}$ written as a mixed number?

(a) 21
(b) $6\frac{3}{4}$
(c) $4\frac{3}{6}$
(d) 4

26 In the number 56,734, what is the value of the 6?

(a) 6
(b) 60
(c) 600
(d) 6,000

27 Bev earns \$480 per week. She spends 15% of her salary on food. What is the total amount of money Bev spends on food?

(a) \$465.00
(b) \$72.00
(c) \$15.00
(d) \$7.20

28 Joe had \$50. He spent \$20.25 for shoes, \$10.50 for a shirt, and \$5.75 for a tie. How much money does he have left?

(a) \$13.50
(b) \$14.50
(c) \$14.60
(d) \$15.50

29 On a map, 1 centimeter represents 100 kilometers. How many kilometers are represented by 2.5 centimeters?

(a) 0.025
(b) 2.5
(c) 25
(d) 250

30 Solve for x: $\frac{4}{9} = \frac{24}{x}$

(a) 216
(b) 144
(c) 54
(d) 6

31 Ken received \$25.60 for 4 hours of work. What was Ken's hourly wage?

(a) \$6.15
(b) \$6.40
(c) \$21.60
(d) \$102.40

32 The fraction $\frac{3}{4}$ is equivalent to

(a) 0.75
(b) $1\frac{1}{3}$
(c) 3.4
(d) 25%

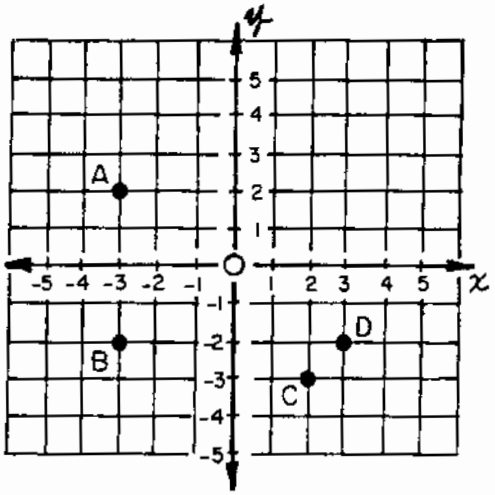
33 A multiple-choice test question has four choices for the answer. If Diana answers the question by guessing one of the choices, what is the probability that she selected the correct answer?

(a) 1
(b) $\frac{3}{4}$
(c) $\frac{1}{3}$
(d) $\frac{1}{4}$

34 Which is the lowest common denominator of $\frac{2}{3}$, $\frac{1}{6}$, and $\frac{1}{8}$?

(a) 12
(b) 24
(c) 48
(d) 144

35 On the graph below, which point has coordinates (3,–2)?



(a) *A*
(b) *B*
(c) *C*
(d) *D*

36 Lynn bought a refrigerator by making a $75 downpayment and twelve monthly payments of $45 each. What was the total cost of Lynn's refrigerator?

(a) $465
(b) $540
(c) $615
(d) $690

37 What is the mode of the following numbers?

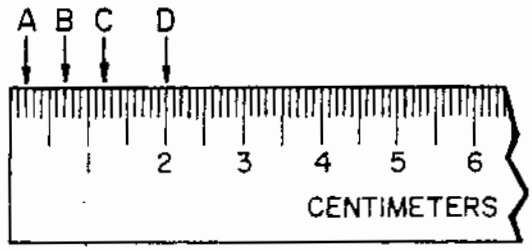
156, 132, 150, 156, 165, 170

(a) 150
(b) 153
(c) 156
(d) 170

38 The prime factors of a certain number are 2, 3, and 5. What is the number?

(a) 30
(b) 25
(c) 11
(d) 10

39 Which point on the ruler below represents 2 millimeters?



(a) *A*
(b) *B*
(c) *C*
(d) *D*

40 In the diagram below, each  represents 100 chocolate chip cookies sold. How many chocolate chip cookies were sold?

(a) 425
(b) 450
(c) 475
(d) 575

41 What is the value of $a^2 + 5$ when $a = 3$?

(a) 64
(b) 45
(c) 14
(d) 11

42 Which angle measures *less* than 90 degrees?

(a) an acute angle
(b) a right angle
(c) a straight angle
(d) an obtuse angle

43 Kristina needs $80 to buy a bicycle. She has $35. If she saves $10 a week from her earnings, what is the *least* number of weeks she must work to save enough money?

(a) 8
(b) 5
(c) 3
(d) 4

44 Which mathematical sentence is represented by the statement below?

If 4 is increased by a certain number, the result is 60.

(a) $N - 4 = 60$
(b) $4 \times N = 60$
(c) $4 + N = 60$
(d) $N = 60 + 4$

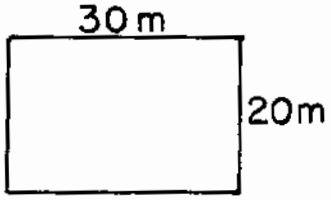
45 Greg bought a typewriter for $210. If there is a 7% sales tax, how much tax will he pay?

(a) $14.70
(b) $30.00
(c) $224.70
(d) $240.00

46 Which set of fractions is ordered from largest to smallest?

(a) $\frac{1}{4}, \frac{1}{2}, \frac{1}{3}$
(b) $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$
(c) $\frac{1}{3}, \frac{1}{2}, \frac{1}{4}$
(d) $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}$

47 What is the area of the rectangle below?



(a) 50 m^2
(b) 100 m^2
(c) 200 m^2
(d) 600 m^2

48 What is the value of $2 \times 4 + 3 \times 3$?

(a) 12
(b) 17
(c) 33
(d) 72

49 Which is equivalent to $\frac{a}{b} \div \frac{c}{d}$?

(a) $\frac{a \times d}{b \times c}$
(b) $\frac{a \times c}{b \times d}$
(c) $\frac{a + c}{b + d}$
(d) $\frac{a - c}{b - d}$

50 Martha took $5\frac{1}{2}$ hours to drive to the beach. If she left home at 1:45 p.m., what time did she arrive at the beach?

(a) 6:15 p.m.
(b) 6:45 p.m.
(c) 7:15 p.m.
(d) 7:45 p.m.

51 Which formula should be used to find the area of a circle?

(a) $C = \pi d$
(b) $P = 2\ell + 2w$
(c) $A = \frac{bh}{2}$
(d) $A = \pi r^2$

52 What is the total number of primes between 12 and 30?

(a) 1
(b) 5
(c) 3
(d) 7

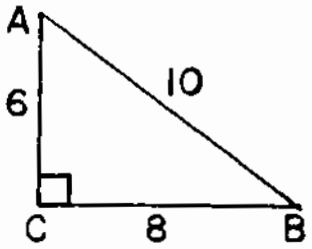
53 The rates at a parking garage are:

\$0.50 for the first hour
\$0.15 for each additional half-hour

What is the cost of parking a car at the garage for 3 hours?

(a) \$0.80
(b) \$0.95
(c) \$1.10
(d) \$1.50

54 In triangle *ABC* below, what is the ratio of *AC* to *CB*?



(a) $\frac{3}{4}$
(b) $\frac{4}{5}$
(c) $\frac{3}{5}$
(d) $\frac{5}{3}$

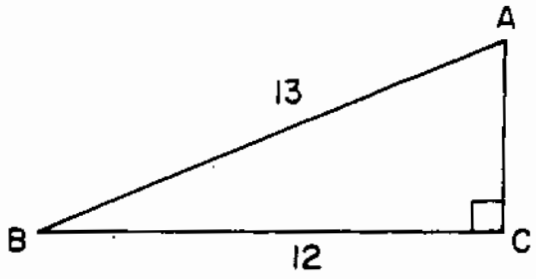
55 What is the sum of $\frac{7}{8}$ and $\frac{3}{8}$?

(a) $\frac{77}{64}$
(b) $\frac{10}{16}$
(c) $\frac{1}{2}$
(d) $\frac{5}{4}$

56 A videocassette recorder (VCR) costs a store owner \$150. He wants to make a 30% profit on his cost. At what price should he sell the VCR?

(a) \$500
(b) \$255
(c) \$195
(d) \$180

57 Triangle *ABC* below is a right triangle. Using the Pythagorean theorem, $c^2 = a^2 + b^2$, what is the length of side $\overline{AC}$?

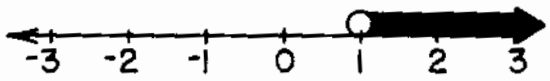


(a) 1
(b) 5
(c) 25
(d) $\sqrt{50}$

58 What is the value of $6\frac{1}{4} - 2\frac{3}{4}$?

(a) $3\frac{1}{4}$
(b) $3\frac{1}{2}$
(c) $4\frac{1}{4}$
(d) $4\frac{1}{2}$

59 Which inequality is shown by the graph below?



(a) $x < 1$
(b) $x \geq 1$
(c) $x \leq 1$
(d) $x > 1$

60 Sarah sold \$120 worth of magazines during one month. She received \$30 as commission for her work. What is the rate of commission on her sales?

(a) 25%
(b) 30%
(c) 36%
(d) 360%