

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 Add:

$$\begin{array}{r} 57 \\ 509 \\ + 4 \\ \hline \end{array}$$

9 How many centimeters are in the perimeter of a square with a side measuring 3 centimeters?

2 Reduce $\frac{15}{35}$ to lowest terms.

10 Dan's test scores in math are 70, 85, 75, 80, and 80. What is Dan's average (mean) score?

3 Subtract:

$$\begin{array}{r} 29,070 \\ 14,924 \\ \hline \end{array}$$

11 Multiply:

$$\begin{array}{r} 31.6 \\ \times 5.2 \\ \hline \end{array}$$

4 Lauren plans to travel 65 kilometers each day on a long distance bicycle trip. At that rate, how many days will she take to travel 390 kilometers?

12 What is the greatest common factor of 16, 24, and 40?

5 What is 18,652 rounded to the nearest hundred?

13 What is the mode of the following numbers?
3, 8, 2, 9, 8, 8, 7, 3

6 Solve for x: $12x + 5 = 29$

14 Add: $3.8 + 6 + 1.4$

7 Divide: $6 \overline{)25.32}$

15 From $\frac{8}{10}$ subtract $\frac{1}{2}$.

8 Multiply:

$$\begin{array}{r} 307 \\ \times 56 \\ \hline \end{array}$$

16 What is the sum of +23 and -19?

17 Subtract: 15.7
 8.42

19 Jackie earns \$5.65 per hour. How many hours must she work to earn \$101.70?

18 Using the formula $C = \pi D$, what is the value of C if $D = 8$ and $\pi = 3.14$?

20 Add: $7\frac{2}{5} + 4\frac{1}{2}$

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 Which number is *not* divisible by 3?

- (a) 17 (c) 12
(b) 15 (d) 9

22 José bought a pair of jeans for \$15 and a shirt for \$12. If he gave the cashier a \$50 bill, how much change should he receive?

- (a) \$23 (c) \$35
(b) \$25 (d) \$38

23 Solve for z : $\frac{6}{11} = \frac{z}{33}$

- (a) 6 (c) 3
(b) 18 (d) 44

24 Which is equal to $6\frac{3}{4}$?

- (a) $\frac{13}{4}$ (c) $\frac{72}{4}$
(b) $\frac{27}{4}$ (d) $\frac{4}{27}$

25 A cake takes 50 minutes to bake. If Joan puts the cake in the oven at 12:25 p.m., at what time will the cake be done?

- (a) 12:50 p.m. (c) 1:15 p.m.
(b) 1:05 p.m. (d) 1:20 p.m.

26 Bob is buying a coat that costs \$75.00. If the sales tax is 7%, how much tax must he pay?

- (a) \$5.25 (c) \$5.95
(b) \$5.65 (d) \$6.95

27 Which number is the best estimate of the product of 68×52 ?

- (a) 3500 (c) 3000
(b) 2500 (d) 4000

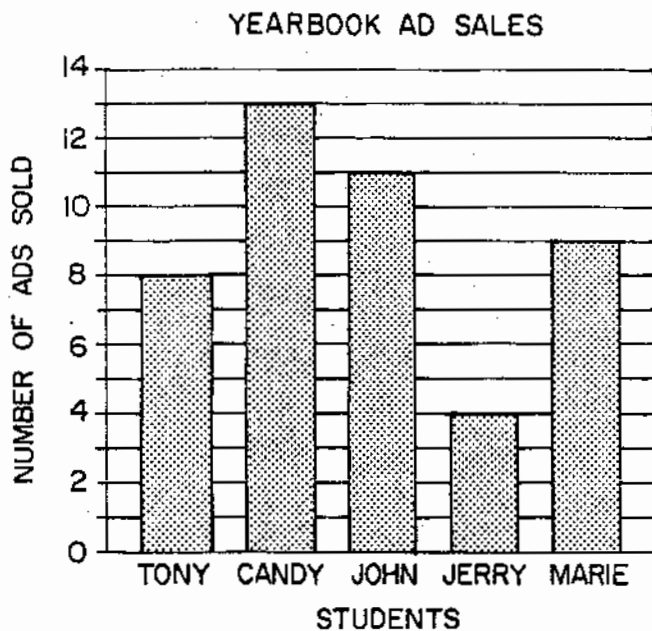
28 Which number is equal to 2^4 ?

- (a) 6 (c) 16
(b) 8 (d) 24


29 Which group of fractions is arranged in order from smallest to largest?

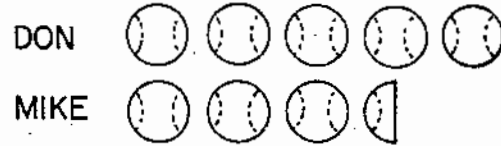
- (a) $\frac{1}{6}, \frac{1}{3}, \frac{1}{2}, \frac{1}{8}$ (c) $\frac{1}{3}, \frac{1}{2}, \frac{1}{6}, \frac{1}{8}$
 (b) $\frac{1}{2}, \frac{1}{3}, \frac{1}{8}, \frac{1}{6}$ (d) $\frac{1}{8}, \frac{1}{6}, \frac{1}{3}, \frac{1}{2}$

30 The bar graph below shows the number of ads sold by students for their yearbook. Students who sell 8 or more ads earn a free yearbook. How many students earned free yearbooks?



- (a) 1 (c) 3
 (b) 2 (d) 4

31 In the picture graph below, one  represents 40 base hits. How many more base hits does Don have than Mike?



- (a) $1\frac{1}{2}$ (c) 60
 (b) 50 (d) 340

32 Janet is buying a new car. She agreed to pay \$5000 down and \$300 per month for two years. What is the total cost of the car?

- (a) \$5300 (c) \$11,000
 (b) \$5600 (d) \$12,200

33 The cost for typing a term paper is:

\$20.00 for the first 10 pages
 \$0.50 for each additional page

What is the total cost for typing an 18-page paper?

- (a) \$24.00 (c) \$28.00
 (b) \$26.50 (d) \$29.00

34 Jason spent $1\frac{1}{2}$ hours practicing soccer each day for 5 days. What is the total number of hours Jason practiced?

- (a) $3\frac{1}{3}$ (c) $6\frac{1}{2}$
(b) $3\frac{1}{2}$ (d) $7\frac{1}{2}$

35 Which number represents fifteen and five hundredths?

- (a) 0.155 (c) 15.05
(b) 1.55 (d) 15.5

36 Which number is less than -3 ?

- (a) $+1$ (c) -4
(b) -1 (d) $+4$

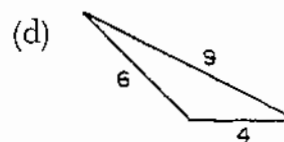
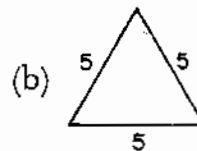
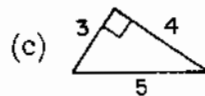
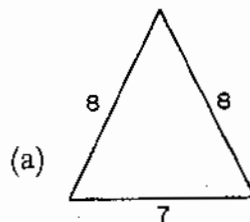
37 Which is a prime number?

- (a) 9 (c) 12
(b) 10 (d) 19

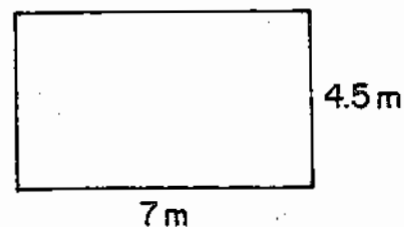
38 Joe opened a bank account with deposits of \$87.39 and \$156.02. He later made withdrawals of \$17.56 and \$90.05. What was the balance remaining in his account?

- (a) \$135.80 (c) \$170.92
(b) \$135.90 (d) \$351.02

39 Which triangle is equiangular?

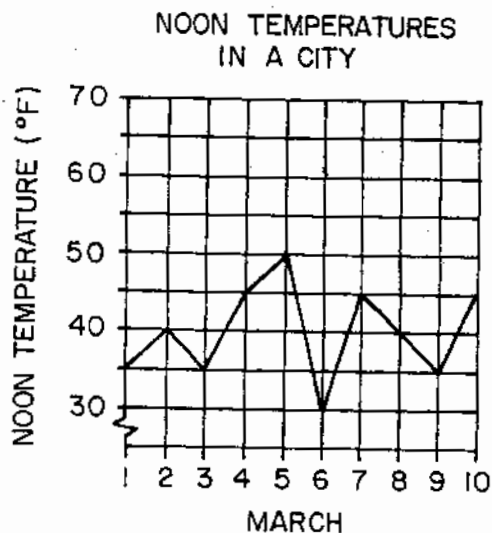


40 What is the number of square meters in the area of the rectangle below?



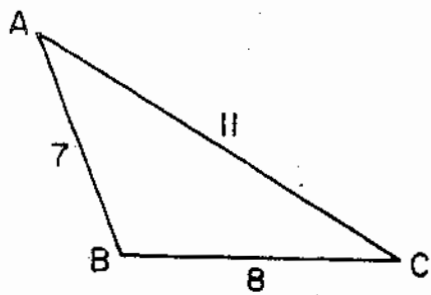
- (a) 11.5 (c) 31.5
(b) 23.0 (d) 315.0

- 41 The graph below shows the noontime temperatures in a city on the first ten days in March. How much warmer was March 4 than March 6?



- (a) 10° (c) 20°
 (b) 15° (d) 25°

- 42 In triangle ABC below, what is the ratio of side AB to side AC ?



- (a) $\frac{7}{8}$ (c) $\frac{8}{11}$
 (b) $\frac{7}{11}$ (d) $\frac{11}{7}$

- 43 What is the least common multiple of 2, 3, and 5?

- (a) 1 (c) 30.
 (b) 15 (d) 60

- 44 Which is the algebraic representation of two more than the product of x and y ?

- (a) $\frac{x}{y} + 2$ (c) $x + y - 2$
 (b) $xy + 2$ (d) $x - y - 2$

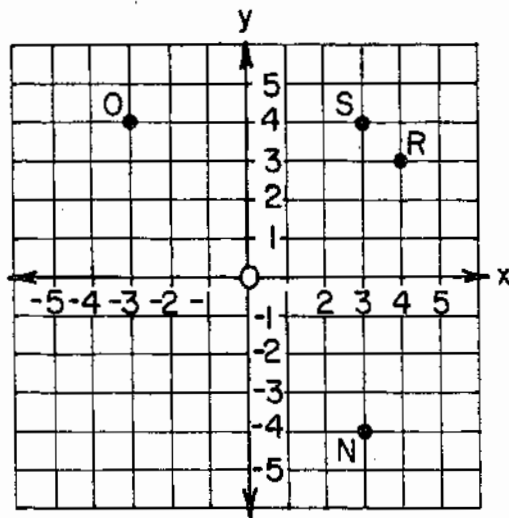
- 45 Two cities that are 150 miles apart are shown on a map as being 5 inches apart. What is the scale used for the map?

- (a) 1 in = 30 miles
 (b) 1 in = 150 miles
 (c) 1 in = 3 miles
 (d) 1 in = 750 miles

- 46 The original price of a jacket was \$80. The jacket is on sale for 15% off. What is the sale price of the jacket?

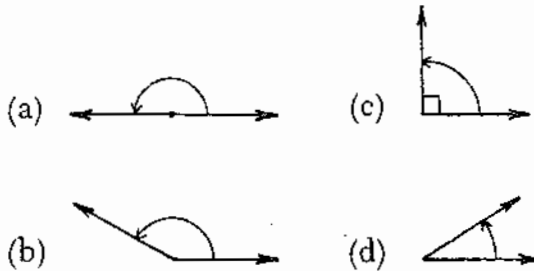
- (a) \$12.00 (c) \$78.80
 (b) \$68.00 (d) \$92.00

- 47 On the graph below, which point has the coordinates (3,4)?



- (a) N (c) R
(b) O (d) S

- 48 Which drawing represents an acute angle?



- 49 Which inequality is represented by the graph below?



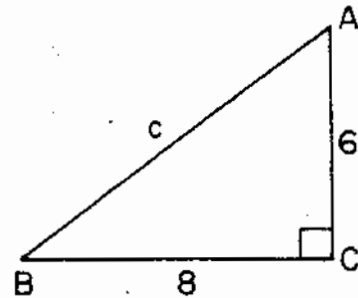
- (a) $x > 3$ (c) $x < 3$
(b) $x < -3$ (d) $x > -3$

- 50 What percent of the figure below is shaded?



- (a) 25% (c) 33.3%
(b) 30% (d) 300%

- 51 In the triangle below, $AC = 6$ and $CB = 8$. Using the formula $a^2 + b^2 = c^2$, what is the value of c ?

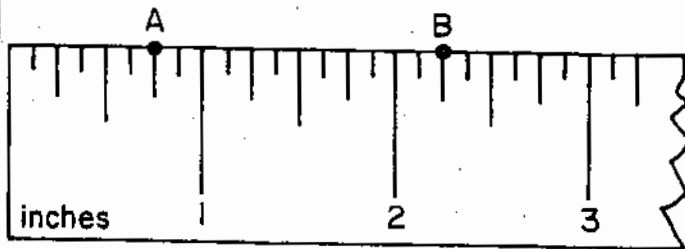


- (a) 6 (c) 17
(b) 10 (d) 43

- 52 How many millimeters are equal to 20 centimeters?

- (a) 10 (c) 100
(b) 20 (d) 200

53 What is the distance in inches from A to B on the ruler below?



- (a) $\frac{1}{2}$ (c) $1\frac{5}{8}$
 (b) $1\frac{1}{2}$ (d) $2\frac{1}{2}$

54 Which is *not* equivalent to 75%?

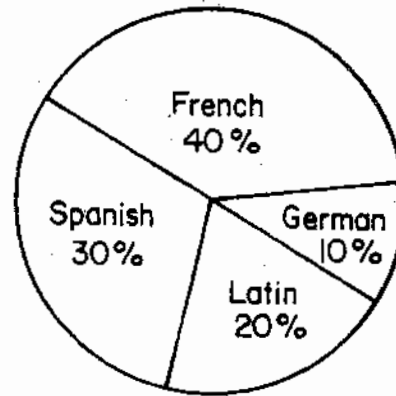
- (a) 7.5 (c) $\frac{6}{8}$
 (b) 0.75 (d) $\frac{3}{4}$

55 Mary wants to wallpaper an area of 320 square feet. If each roll of wallpaper covers 70 square feet, what is the least number of rolls needed to completely cover the walls?

- (a) 250 (c) 5
 (b) 6 (d) 4

56 The circle graph below shows the percentage of language-class students taking each foreign language at West High.

LANGUAGE CLASSES



If 300 students are in language classes, how many students are in Spanish classes?

- (a) 120 (c) 80
 (b) 90 (d) 40

57 The probability that an event will occur is $\frac{7}{8}$. What is the probability the event will *not* occur?

- (a) 1 (c) $\frac{7}{8}$
 (b) 0 (d) $\frac{1}{8}$

58 Three pencils cost 40¢. What is the total cost of one dozen pencils?

- (a) \$1.60 (c) \$4.80
(b) \$2.40 (d) \$4.00

59 What is the value of $16 - 4(2 + 1)$?

- (a) 36 (c) 9
(b) 25 (d) 4

60 Which does *not* have a whole number square root?

- (a) 16 (c) 81
(b) 49 (d) 200