

F. MATDE

intersecting lines



(a)



(b)



(c)

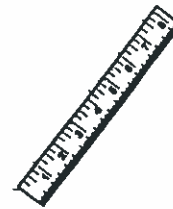


(d)

abacus



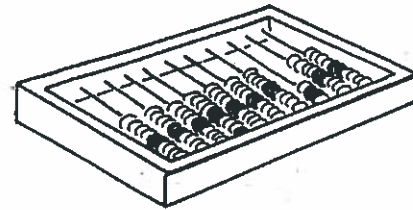
(a)



(b)



(c)



(d)

1.

possible weight of a full-grown man

200 lb

(a)

200 T

(b)

200 oz

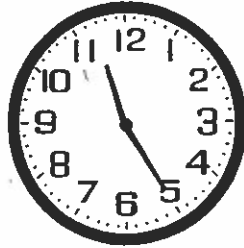
(c)

200 g

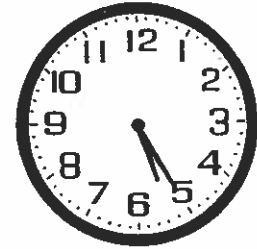
(d)

2.

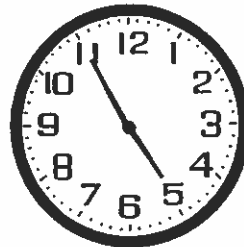
five to five



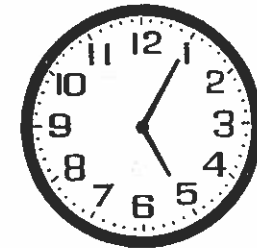
(a)



(b)



(c)



(d)

3.

the sum of the interior angles of a quadrilateral

depends on the kind of quadrilateral	is always 360°
(a)	(b)
depends on the length of the sides	is pi times the base angle
(c)	(d)

4.

four hundred five written in Roman numerals

CDV	FIIII
(a)	(b)
XLV	CML
(c)	(d)

5.

$AB \leq CD$

The width of AB is greater than or equal to the width of CD.

(a)

The angle of AB is greater than the angle of CD.

(b)

The parallel lines of AB and CD are greater than or equal to each other.

(c)

The length of segment AB is less than or equal to the length of segment CD.

(d)

6.

decimal equivalent of one-eighth

.18

(a)

1.08

(b)

.125

(c)

.130

(d)


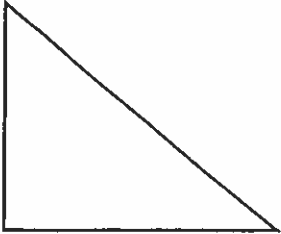
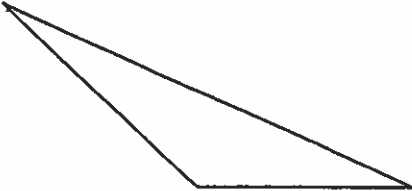
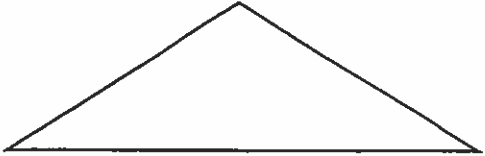
7.

prefix meaning "hundred"

prot-	cent-
(a)	(b)
deci-	per-
(c)	(d)

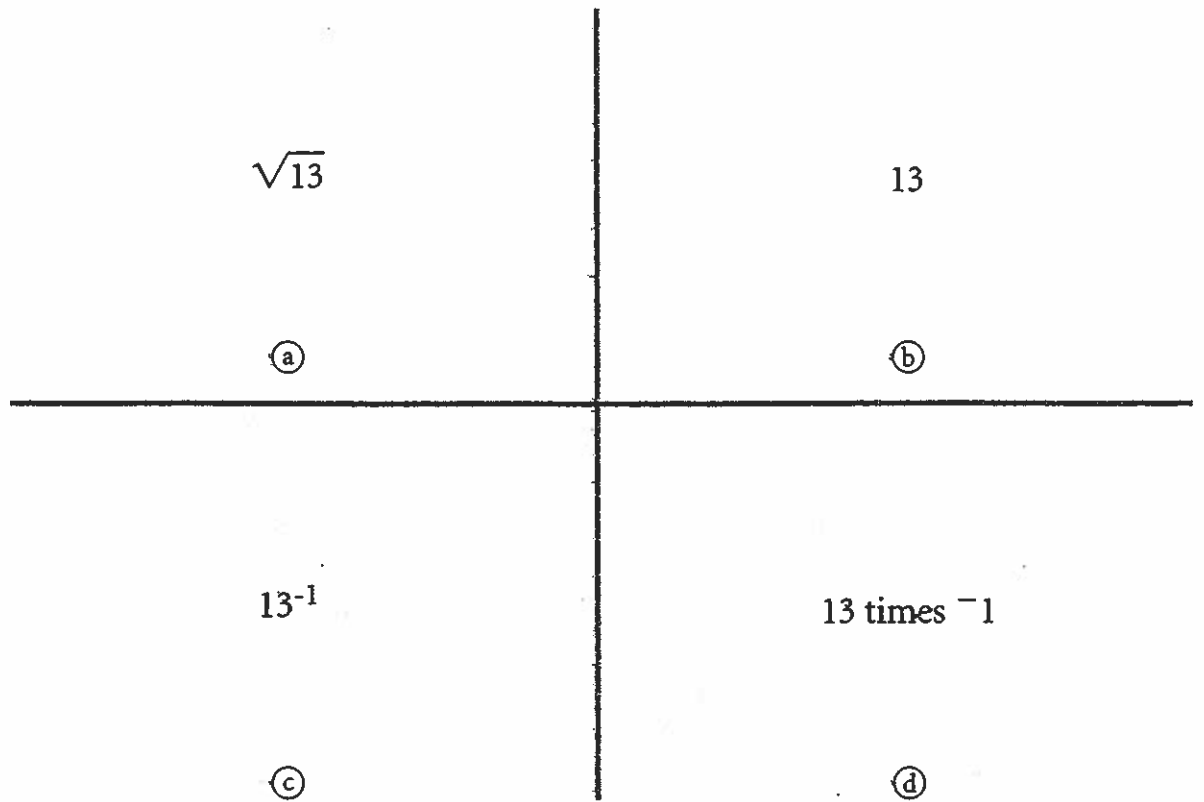
8.

acute triangle

	
(a)	(b)
	
(c)	(d)

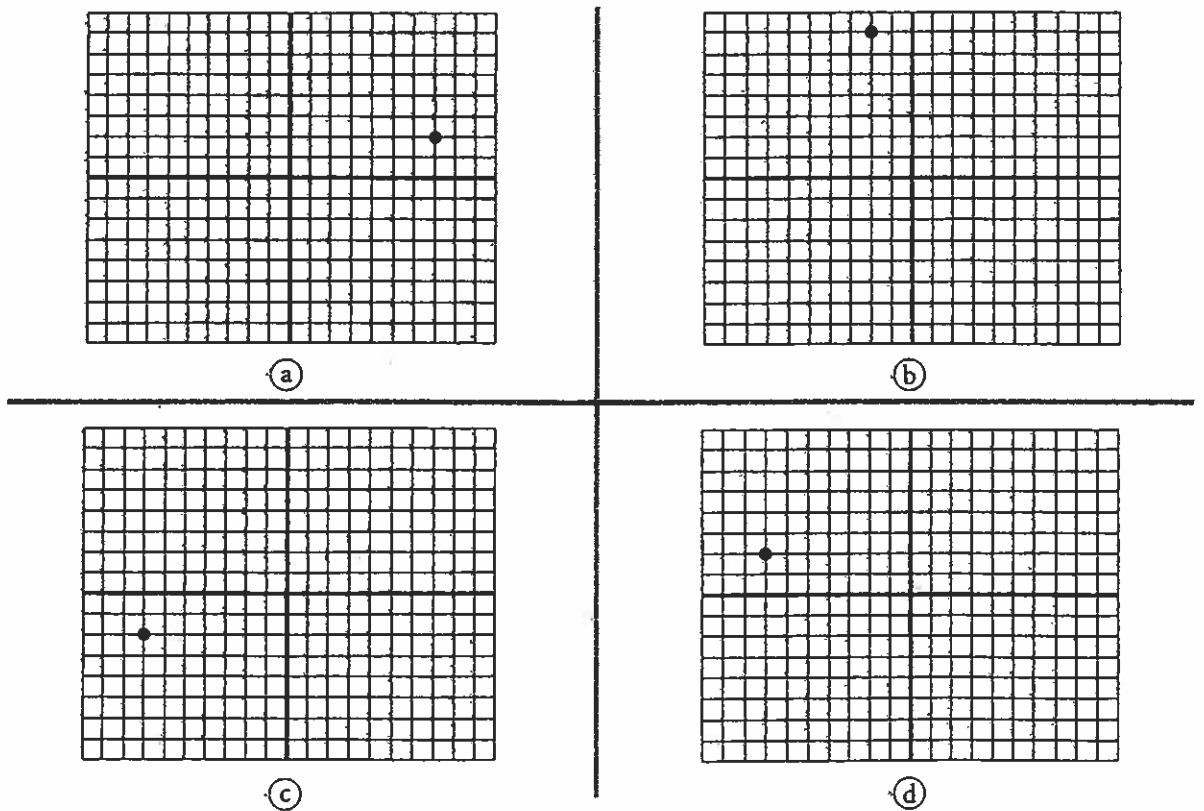
9.

$|-13|$



10.

where $x = -2$ and $y = 7$



11.

millennium

one hundred years

(a)

one thousand years

(b)

two thousand years

(c)

one million years

(d)

12.

correct method of finding the mean

Divide the value on the ordinate by the observed value on the abscissa.

(a)

Create a stem-and-leaf chart, and find the most frequently occurring observation.

(b)

Multiply the number of observations in the data set by the lowest number, and divide by two.

(c)

Sum the variables, and divide by the number of variables in the data set.

(d)

13.

The Pythagorean Theorem could be used to find _____.

the area of a circle if the radius is known

(a)

the volume of a cylinder if the height of the side and width of the base are known

(b)

the length of one side of a right triangle if the lengths of the other two sides are known

(c)

the capacity of a sphere if the diameter and circumference are known

(d)

14.

4:8 as 16:___

64

(a)

32

(b)

20

(c)

256

(d)

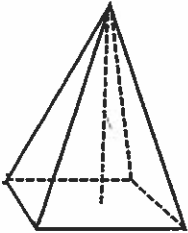
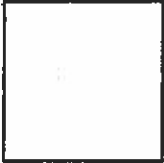
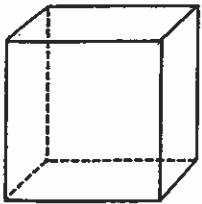
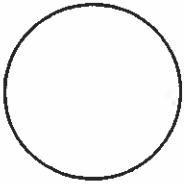
15.

estimated capacity of a toothpaste cap

1 qt a	.1 fl oz b
1 yd ² c	1 kg d

16.

a closed-figure having all points an equal distance from the center

 a	 b
 c	 d

17.

Write 4.7×10^{-2} in standard form.

$$\frac{47}{1000}$$

(a)

$$4.7 + 100$$

(b)

$$|47| \times 0.01$$

(c)

$$0.047$$

(d)

18.

prefix meaning "many"

poly-

(a)

peri-

(b)

ac-

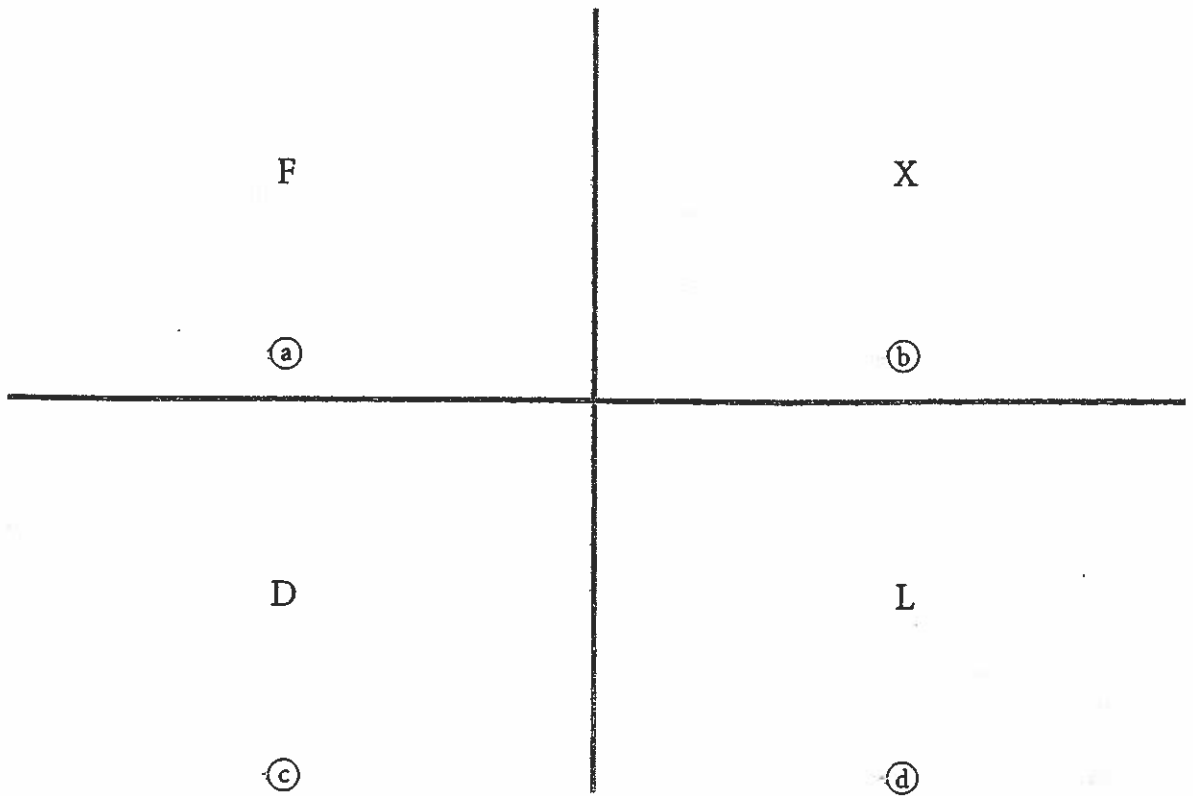
(c)

ante-

(d)

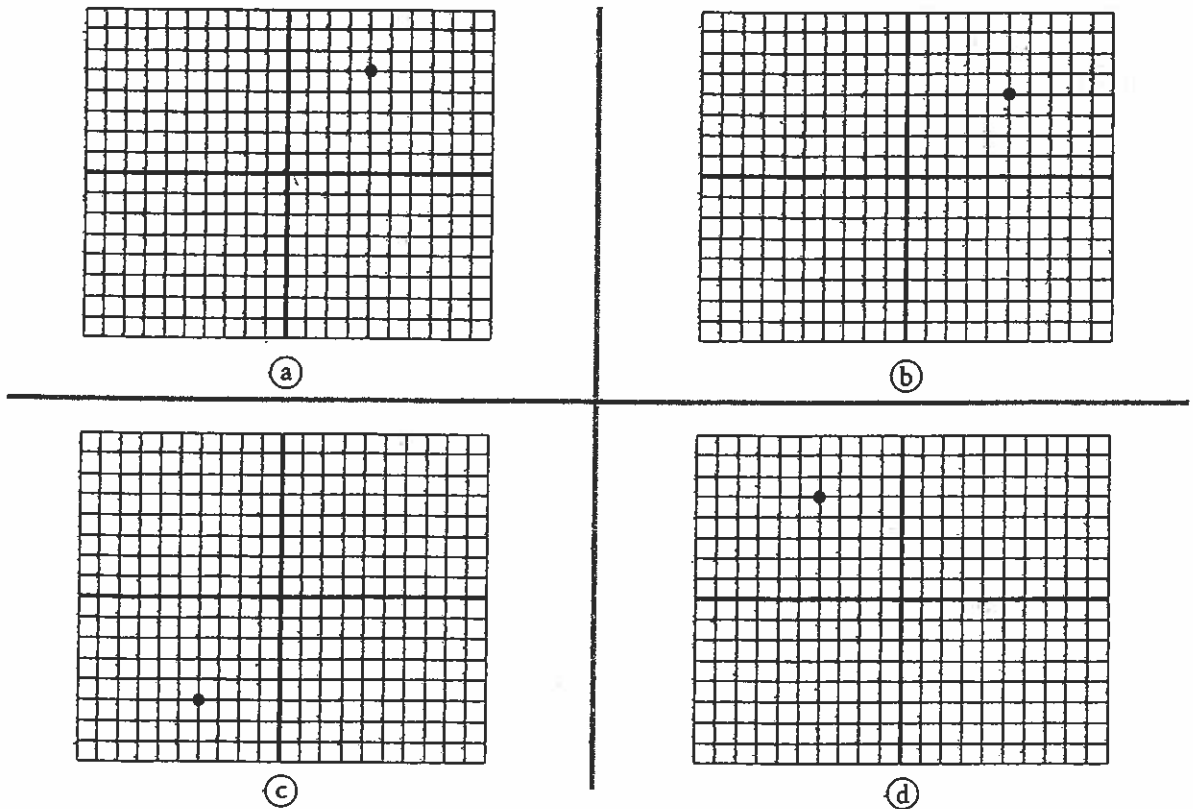
19.

500 in Roman numerals



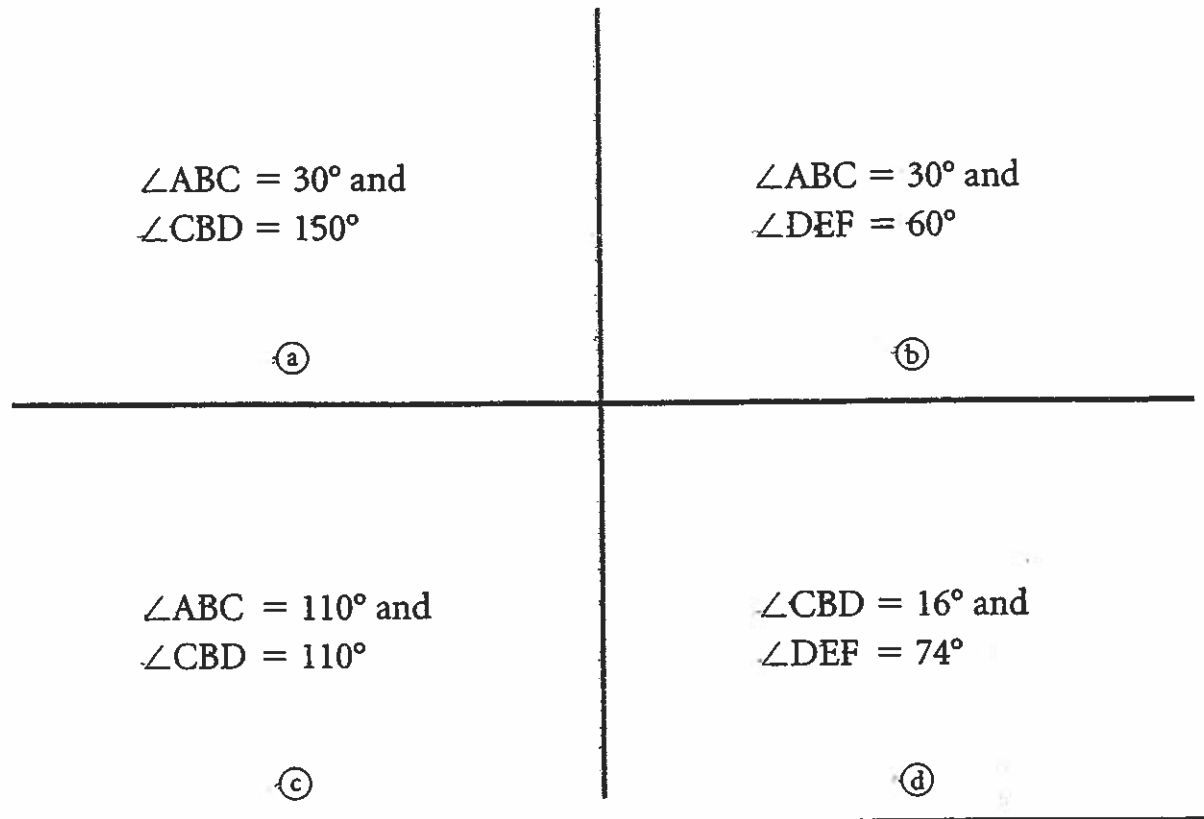
20.

where $x = 4$ and $y = 5$



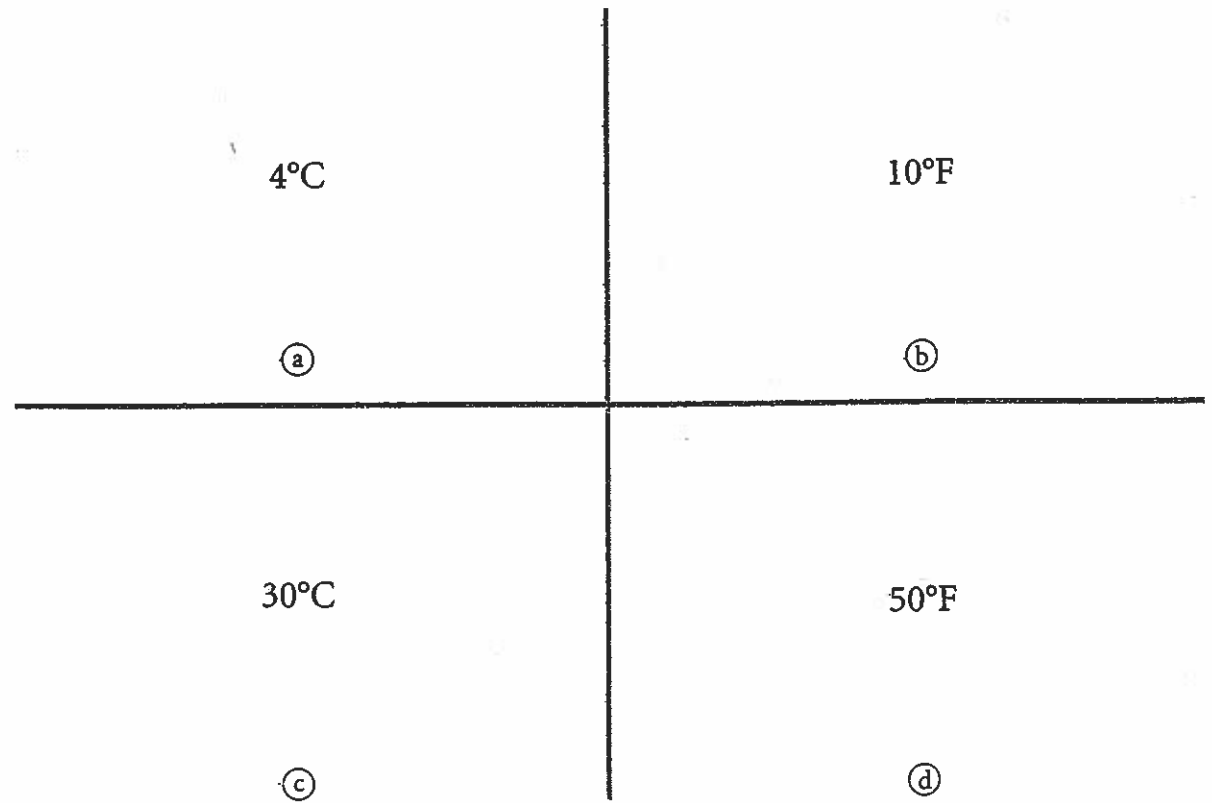
21.

supplementary angles



22.

a very cold day



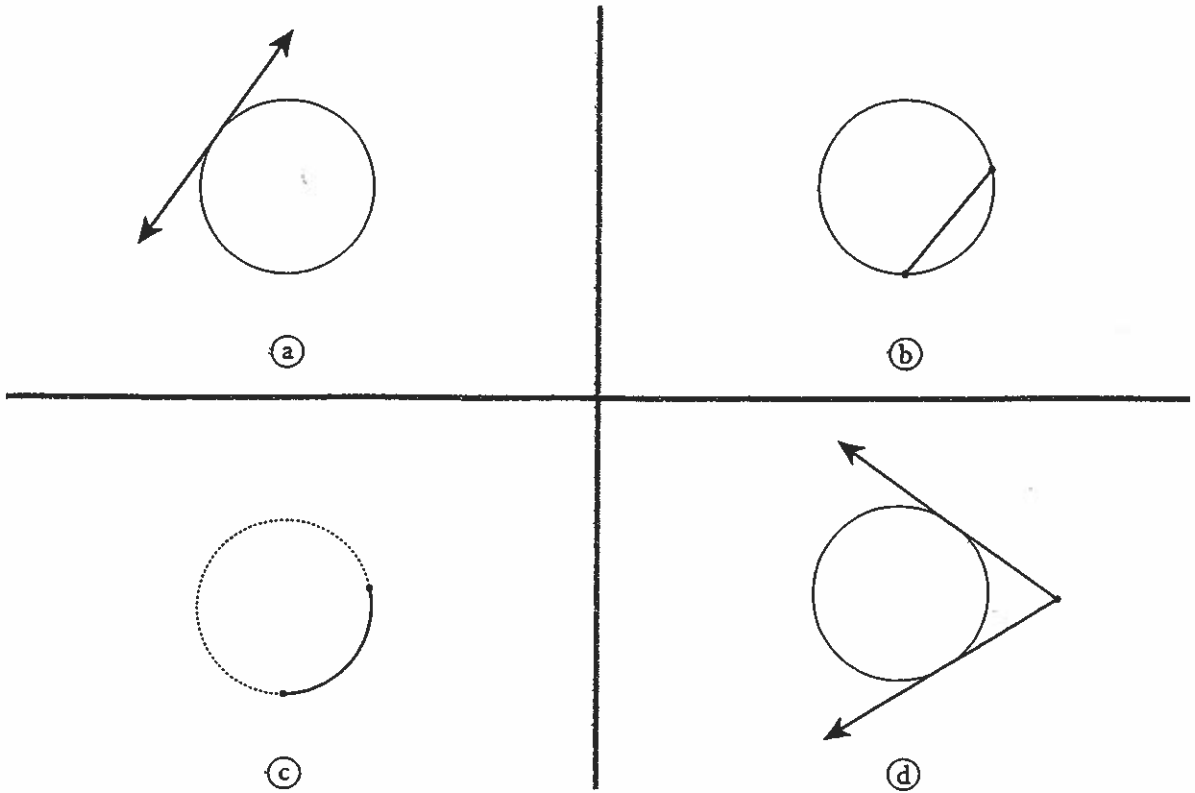
23.

decimal equivalent of three-eighths

.38	.038
(a)	(b)
.375	3.08
(c)	(d)

24.

chord



25.

all perfect cubes

21, 33, 66	9, 18, 36
(a)	(b)
0, 100, 300	1, 27, 216
(c)	(d)

26.

number of days in a leap year

365	366
(a)	(b)
28	29
(c)	(d)

27.

Write 3.6×10^4 in standard form.

$$\frac{36,000}{10,000}$$

(a)

$$3.6 + 10,000$$

(b)

36,000

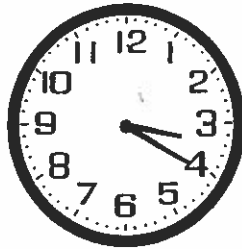
(c)

|3600|

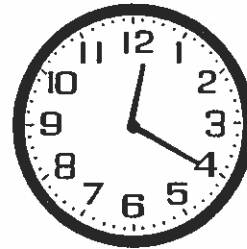
(d)

28.

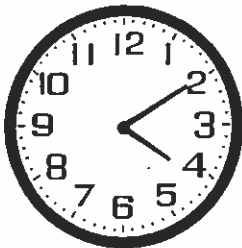
twenty after four



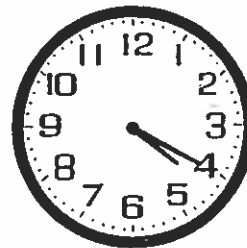
(a)



(b)



(c)



(d)

Operations and Computation

1. $9.4 - 2.3 =$

Work Area

(a) 0.117
(b) 1.17
(c) 7.1
(d) 11.7

2. Solve for x .
 $6 = 2 + x$

Work Area

(a) 2
(b) 6
(c) 4
(d) 8

1. $7 + (-8) =$

Work Area

(a) -15
(b) -1
(c) 1
(d) 15

2. $25 \div (-5) =$

Work Area

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

3. Find 32% of 400.

Work Area

(a) 20
(b) 12.8
(c) 2.0
(d) 128

4. Evaluate when $y = 9$:
 $\frac{y}{3} - 2 =$

Work Area

(a) 1
(b) 3
(c) 5
(d) 4

5.

$$9 - 5\frac{1}{3} =$$

Work Area

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

6.

$$4.56 \times 0.003 =$$

Work Area

- (a) 0.01368
- (b) 1.258
- (c) 0.01258
- (d) 1.368

7.

54 is what percent
of 81?

Work Area

- (a) 1.5%
- (b) 15%
- (c) 27%
- (d) 67%

8.

$$-5 - 3 =$$

Work Area

- (a) -8
- (b) -2
- (c) 2
- (d) 8

9.

$$0.06 \div 0.0012 =$$

Work Area

- (a) 0.2
- (b) 0.02
- (c) 0.0002
- (d) 2

10.

$$\frac{1}{2} + \frac{2}{3} + \frac{3}{5} =$$

Work Area

- (a) $\frac{1}{5}$
- (b) $\frac{3}{5}$
- (c) $1\frac{1}{30}$
- (d) $1\frac{23}{30}$

11.

$\sqrt{36} \times \sqrt{4} =$

Work Area

- (a) 40
- (b) 9
- (c) 12
- (d) 8

12.

$2.6 \times 0.8 =$

Work Area

- (a) 16.8
- (b) 2.08
- (c) 1.68
- (d) 20.8

13.

$\frac{3}{8} \div 6 =$

Work Area

- (a) $\frac{1}{16}$
- (b) $\frac{1}{4}$
- (c) $2\frac{1}{4}$
- (d) 16

14.

Find 16% of 128.

Work Area

- (a) 19.
- (b) 8.9
- (c) 8.0
- (d) 20.

15.

$0.09 \div 0.0063 =$

Work Area

- (a) 0.5
- (b) 0.0
- (c) 0.1
- (d) 0.1

16.

$8\frac{3}{8} - 4\frac{1}{4} =$

Work Area

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

17.6% of \square is \$24.

Work Area

- (a) \$400
- (b) \$25
- (c) \$144
- (d) \$4

18.

$$-4 - (-8) =$$

Work Area

- (a) -12
- (b) -4
- (c) 4
- (d) 12

19.

$$2\frac{1}{3} \times 3\frac{3}{5} =$$

Work Area

- (a) $8\frac{2}{5}$
- (b) $5\frac{1}{2}$
- (c) $6\frac{1}{5}$
- (d) $4\frac{2}{3}$

20.

Simplify:

$$16 - 4 + 4 \times 2 =$$

Work Area

- (a) 0
- (b) 16
- (c) 20
- (d) 32

21.

$$1\frac{1}{3} - 3\frac{2}{3} =$$

Work Area

- (a) $\frac{4}{11}$
- (b) $\frac{4}{9}$
- (c) $2\frac{3}{4}$
- (d) $3\frac{1}{3}$

22.

Solve for x:
 $x - 14 = 36$

Work Area

- (a) 40
- (b) 22
- (c) 12
- (d) 50

23.

$$6.8 - 5.27 =$$

Work Area

- (a) 1.53
- (b) 4.59
- (c) 1.67
- (d) 5.41

24.

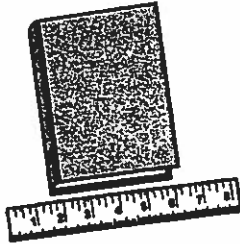
$$156.045$$

Work Area

- (a) 430
- (b) 403
- (c) 43
- (d) 4,030

Process and Applications

About how wide is this book?



- (a) 5.5 inches
- (b) 4.5 inches
- (c) 4 inches
- (d) 5 inches

Rico bought a new tire for his bike that costs \$29.95. He paid 5% in sales taxes. How much did Rico have to pay for his bike tire?



- (a) \$44.93
- (b) \$34.95
- (c) \$31.45
- (d) \$29.95

1. Which of the following metric measurements is the most likely for the volume of a tankful of gasoline?

- (a) 50 mm
- (b) 50 kg
- (c) 50 km
- (d) 50 L

2. Holly bought a gas grill on sale for 20% off the original price. If the original price was \$235, how much did she save? What is another way of asking this question?

- (a) What was the sale price?
- (b) What is 20% of the original price?
- (c) What fraction of the original price was the sale price?
- (d) What is 80% of the sale price?

3. Your class is graded on 5 assignments, each worth 100 points. If you scored an 86, a 72, a 93, a 71, and a 50, how much lower would your average have been if you had not turned in the last assignment (scored a zero)?

- (a) 64.4
- (b) 80.5
- (c) 10
- (d) 16

4. A clothing store is having an end-of-season final clearance sale. It advertises, "Take an additional 25% off the already reduced price." A sweater originally cost \$36, then was reduced to \$24 and placed on this final clearance rack. What percent of the original price was the final sale price?

- (a) 16.7%
- (b) 66.7%
- (c) 25%
- (d) 50%

5. If a company wanted to compare sales figures for last year and this year, what type of graph would best show this?

- (a) bar graph
- (b) Venn diagram
- (c) frequency table
- (d) scatter plot

6. Ben is helping his little brother display his rock collection. Ben's brother has 48 rocks in his collection. How many different ways could they display the rocks so that they are in equal sets?

- (a) 12
- (b) 6
- (c) 10
- (d) 8

7. Andy is getting ready for the school bake sale. How many 5-ounce bags of chocolate chip cookies can he make from a 5-pound bag of cookies?

- (a) 25
- (b) 16
- (c) 12
- (d) 10

8. If 8 cubes fill an empty cube that measures 6 inches on a side, how big are the 8 cubes each side?

- (a) 6 inch
- (b) 2 inch
- (c) 4 inch
- (d) 3 inch



Noelle set up this proportion to solve for y : $\frac{34}{50} = \frac{y}{16}$. Which statement best describes her proportion?

- (a) Incorrect. Should be $\frac{34}{50}$.
- (b) Incorrect. Should be $\frac{16}{34}$.
- (c) It is correct.
- (d) Incorrect. Should be $\frac{50}{16}$.

10. A store is having a sale on cereal. If the package says, "10% free" and the weight of the sale package is 28.6 ounces, finish the statement: 28.6 ounces for the price of _____ (ounces).

- (a) 28
- (b) 25
- (c) 26
- (d) 27

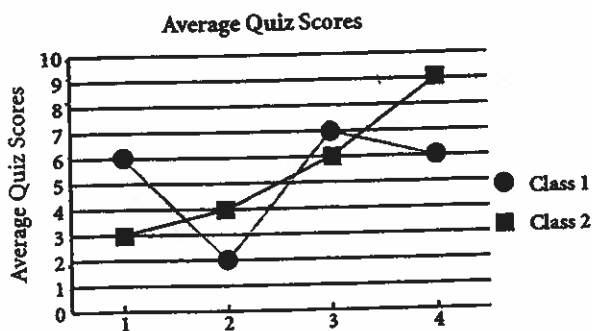
11. If 4 dozen bagels cost \$10.56, how much do 4 bagels cost?

- (a) \$3.52
- (b) \$0.88
- (c) \$0.22
- (d) \$2.64

12. At Parkdale Zoo, one of the African elephants weighs 21,000 pounds. How many tons does the animal weigh?

- (a) 11.5
- (b) 21
- (c) 10
- (d) 10.5

13.



According to the graph above, what was the overall average of daily quiz scores for Class #1 over the four days?

- (a) 5.25
- (b) 5.35
- (c) 5.5
- (d) 5.0

14. You want to use an equal number of dimes and quarters to make \$10.50. How many coins will you need altogether?

- (a) 60
- (b) 35
- (c) 30
- (d) 50

15. Brian bought a $2\frac{1}{2}$ -pound bag of licorice and wants to share it with his friends. If he divides it equally between himself and his 4 friends, how many ounces of licorice will each person get?

- (a) 10 ounces
- (b) 8 ounces
- (c) 5 ounces
- (d) 4 ounces

16. The ratio of boys to girls in a class is 4:5. If there are 36 students in the class, how many students are boys?

- (a) 16
- (b) 20
- (c) 15
- (d) 9

17. Lindsay earns \$7.65 per hour. Her boss has promised her a 7% raise next month. If she works 40 hours per week, how much will she earn per week after she gets her raise?

- (a) \$308.80
- (b) \$327.60
- (c) \$346.00
- (d) \$360.00

18. If a triangular road sign has a center height of 12 inches and a bottom length of 14 inches long, what is the area of the road sign?

- (a) 168 square inches
- (b) 42 square inches
- (c) 84 square inches
- (d) 126 square inches

19. Mr. Berg flew from Sydney, Australia, to New York City. The time in New York is 14 hours behind the time in Sydney. Mr. Berg's flight departed Sydney at 10:25 a.m. on Wednesday, and arrived in New York at 6:40 p.m. on Wednesday. Keeping the time difference between the two locations in mind, how long was Mr. Berg's actual flight?

- (a) 22 hours 15 minutes
- (b) 9 hours 15 minutes
- (c) 8 hours 15 minutes
- (d) 14 hours 15 minutes

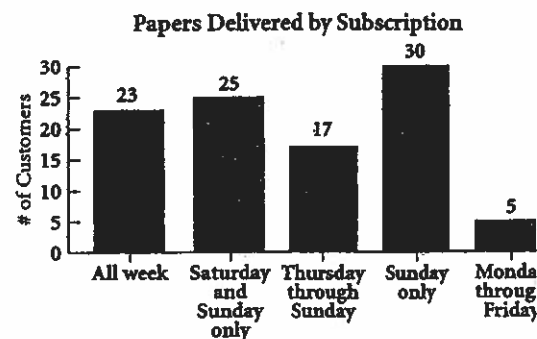
20. At 5:00 p.m., a 4-foot mailbox casts a shadow 6 feet long. At the same time, a tree casts a shadow 36 feet long. How tall is the tree?

- (a) 6 feet
- (b) 30 feet
- (c) 9 feet
- (d) 24 feet

21. A local jewelry store's everyday low price is 60% of the retail price. During a special year-end clearance, the store slashes prices to 70% off retail. What percent of the store's regular everyday price does the sale discount represent?

- (a) 50%
- (b) 30%
- (c) 10%
- (d) 75%

22.



Mia graphed the number of newspaper deliveries on her paper route by day of the week. How many newspapers does she receive for a Friday delivery?

- (a) 22
- (b) 23
- (c) 28
- (d) 45

23. A cell divides in two every hour. At the beginning of the day there are 25 cells. How many cells will there be at the end of 5 hours?

- (a) 125
- (b) 250
- (c) 800
- (d) 625

24. Ahmad wants to know the circumference of a round mirror so he can buy a frame for it. He measured straight across the mirror in the middle and got a diameter of 16 inches. If the formula to figure out circumference is $C = \pi d$, what is the circumference of Ahmad's mirror?

- (a) 50.24 inches
- (b) 32.25 inches
- (c) 34.22 inches
- (d) 25.12 inches

25. Ellen was paid according to the following rules: She earned \$10 the first day. Each day after that, her pay was double whatever it was the day before. How much will she earn for just the seventh day?

- (a) \$700
- (b) \$140
- (c) \$130
- (d) \$640

26. Which representation could you use to compare the maximum depths of the Great Lakes?

- (a) bar graph
- (b) line graph
- (c) frequency table
- (d) scatter plot

27. Your class is graded on 5 assignments, each worth 100 points. If you scored an 86, a 72, a 93, and a 71 on the first 4 assignments, what do you need to score on the fifth assignment to average 75?

- (a) 75
- (b) 65
- (c) 80
- (d) 53

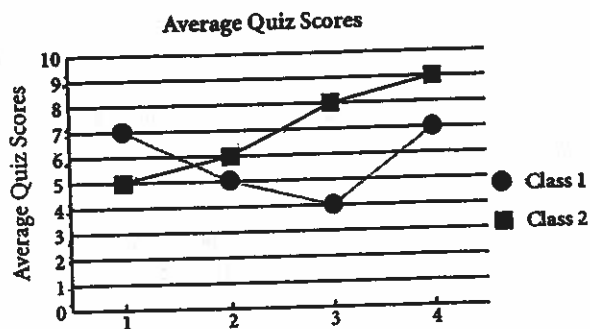
28. Sun-Li bought a stereo system for \$369. She bought the stereo on a payment plan set up so that she would make payments of \$44 each month for 9 months. What percent of Sun-Li's payment each month was interest charges for the payment plan, rounded to the nearest whole number?

- (a) 7%
- (b) 3%
- (c) 9%
- (d) 6%

29. Which of the following metric units is the mostly likely for the width of the cutting edge of a table knife?

- (a) kg
- (b) mL
- (c) km
- (d) mm

30.



Two English classes were having a competition to see which class had the highest average daily quiz scores. See where the average daily quiz scores are graphed. On which day was the difference between the average quiz scores for each class the greatest?

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

**Answer Key Level H,
Form A**

Concepts and Communication

Ex. 1 b

Ex. 2 d

1. a

2. c

3. b

4. a

5. d

6. c

7. b

8. a

9. b

10. b

11. b

12. d

13. c

14. b

15. b

16. d

17. d

18. a

19. c

20. a

21. a

22. b

23. c

24. b

25. d

26. b

27. c

28. d

**Answer Key Level H,
Form A**

Operations and Computation

Ex. 1 d

Ex. 2 c

1. b

2. a

3. d

4. a

5. b

6. a

7. d

8. a

9. b

10. d

11. c

12. b

13. a

14. d

15. c

16. b

17. a

18. c

19. a

20. c

21. a

22. d

23. a

24. b

**Answer Key Level H,
Form A**

Process and Applications

Ex. 1 b

Ex. 2 c

1. d

2. b

3. c

4. d

5. a

6. c

7. b

8. d

9. a

10. c

11. b

12. d

13. a

14. a

15. b

16. a

17. b

18. c

19. a

20. d

21. a

22. d

23. c

24. a

25. d

26. a

27. d

28. a

29. d

30. c