

1

An equation is shown below.

$$12 - 9 + c = 12$$

What value of c makes the equation true?

- A 0
- B 3
- C 9
- D 12

2

Kate has a coin collection. She keeps 7 of the coins in a box, which is only 5% of her entire collection. What is the total number of coins in Kate's coin collection?

- A 12
- B 14
- C 120
- D 140

3

What is the greatest common factor of 36 and 90?

- A 6
- B 18
- C 36
- D 180

7

A rectangle is graphed on a coordinate plane. The coordinates for two of the vertices of the rectangle are $(-5, 8)$ and $(-5, -6)$. What is the distance between the two vertices?

- A 2 units
- B 4 units
- C 10 units
- D 14 units

8

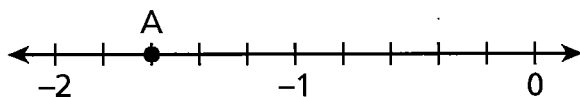
What value of m makes the equation below true?

$$m + 7.9 = 39\frac{1}{2}$$

- A 5.0
- B 31.6
- C 32.4
- D 47.4

9

Point A is shown on the number line below.



What is the location of point A?

- A -1.3
- B -1.35
- C -1.6
- D -1.75

GO ON

10

A right rectangular prism has a base with an area of $25\frac{1}{2}$ square feet and a volume of 153 cubic feet. What is the height, in feet, of the right rectangular prism?

- A 6
- B 51
- C $127\frac{1}{2}$
- D $3,901\frac{1}{2}$

11

All the students in the sixth grade either purchased their lunch or brought their lunch from home on Monday.

- 24% of the students purchased their lunch.
- 190 students brought their lunch from home.

How many students are in the sixth grade?

- A 76
- B 166
- C 214
- D 250

GO ON

18

Pat bounces a basketball 25 times in 30 seconds. At that rate, approximately how many times will Pat bounce the ball in 150 seconds?

- A 120
- B 125
- C 144
- D 145

19

Which expression is equivalent to $5(4x + 3) - 2x$?

- A $18x + 15$
- B $18x + 3$
- C $7x + 8$
- D $2x + 8$

22

Which two expressions are equivalent?

- A $x + x + x$ and x^3
- B $14x + 10 - 2x$ and $16x + 10$
- C $12x + 16x$ and $4(3x + 4x)$
- D $12x^2 + 5x + 10$ and $17x^2 + 10$

23

A machine fills boxes at a constant rate. At the end of 35 minutes, it has filled 5 boxes. Which table represents the relationship between the number of minutes the machine fills boxes and the number of boxes it has filled?

FILLING BOXES**A**

Time (minutes)	Boxes Filled
7	1
14	2
21	3
28	4

FILLING BOXES**C**

Time (minutes)	Boxes Filled
1	7
2	14
3	21
4	28

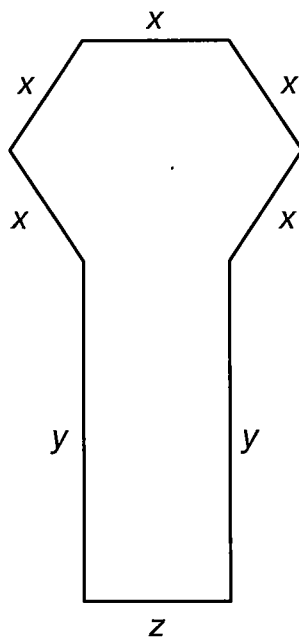
FILLING BOXES**B**

Time (minutes)	Boxes Filled
5	1
10	2
15	3
20	4

FILLING BOXES**D**

Time (minutes)	Boxes Filled
1	5
2	10
3	15
4	20

Which expression represents the perimeter of the figure below?



- A $5x + 2y$
- B $x + y + z$
- C $5x + 2y + z$
- D $(5 + 2 + 1)(x + y + z)$

STOP

28

Which expression is equivalent to $9(9m + 3t)$?

- A $18m + 3t$
- B $81m + 3t$
- C $18m + 12t$
- D $81m + 27t$

29

A zoo has 15 toucans and 60 parrots. What is the ratio of the number of toucans to the number of parrots at the zoo?

- A 1 : 4
- B 1 : 5
- C 4 : 1
- D 4 : 5

30

A restaurant used 231 eggs last week. Of these, 46 were brown in color. The remaining eggs were white in color. Which equation can be used to solve for w , the number of white eggs used last week?

- A $231 + 46w = 0$
- B $46 + w = 231$
- C $w = 231 + 46$
- D $231 = 46w$

GO ON

32

What number is **not** part of the solution set to the inequality below?

$$w - 10 \leq 16$$

- A 11
- B 15
- C 26
- D 27

33

An ice cream shop sold 48 vanilla milkshakes in a day, which was 40% of the total number of milkshakes sold that day. What was the total number of milkshakes that the ice cream shop sold that day?

- A 60
- B 72
- C 100
- D 120

34

Which expression represents the phrase below?

3 fewer than a number, p

- A $3 - p$
- B $p \div 3$
- C $3 \div p$
- D $p - 3$

GO ON