

#1

ID: fa80893a

If $2x + 3 = 9$, what is the value of $6x - 1$?

#2

ID: 0adbe034

If $4x - 28 = -24$, what is the value of $x - 7$?

- A) -24
- B) -22
- C) -6
- D) -1

#3

ID: baca4a4c

$$7(2x - 3) = 63$$

Which equation has the same solution as the given equation?

- A) $2x - 3 = 9$
- B) $2x - 3 = 56$
- C) $2x - 21 = 63$
- D) $2x - 21 = 70$

#4

ID: 097e10f5

What value of p satisfies the equation $5p + 180 = 250$?

- A) 14
- B) 65
- C) 86
- D) 250

#5

ID: 590f2187

If $3x - 27 = 24$, what is the value of $x - 9$?

- A) 1
- B) 8
- C) 24
- D) 35

#6

ID: f2b63f49

$$8x - 7x + 130 = 260$$

What value of x is the solution to the given equation?

#7

ID: 05417146

$$w + 7 = 357$$

What value of w is the solution to the given equation?

- A) 51
- B) 350
- C) 364
- D) 3,577

#8

ID: 51aabd93

$$(p + 3) + 8 = 10$$

What value of p is the solution to the given equation?

- A) -1
- B) 5
- C) 15
- D) 21

#9

ID: 349a5bc1

$$4x + 5 = 165$$

What is the solution to the given equation?

#10

ID: 6105234d

John paid a total of \$ 165 for a microscope by making a down payment of \$ 37 plus p monthly payments of \$ 16 each. Which of the following equations represents this situation?

- A) $16p - 37 = 165$
- B) $37p - 16 = 165$
- C) $16p + 37 = 165$
- D) $37p + 16 = 165$

#11

ID: f305b5ca

Lorenzo purchased a box of cereal and some strawberries at the grocery store. Lorenzo paid \$ 2 for the box of cereal and \$ 1.90 per pound for the strawberries. If Lorenzo paid a total of \$ 9.60 for the box of cereal and the strawberries, which of the following equations can be used to find p , the number of pounds of strawberries Lorenzo purchased? (Assume there is no sales tax.)

- A) $1.90p + 2 = 9.60$
- B) $1.90p - 2 = 9.60$
- C) $1.90 + 2p = 9.60$
- D) $1.90 - 2p = 9.60$

#12

ID: 5c94e6fa

$$3x + 21 = 3x + k$$

In the given equation, k is a constant. The equation has infinitely many solutions. What is the value of k ?

#13

ID: 2f0a43b2

If $\frac{x}{8} = 5$, what is the value of $\frac{8}{x}$?

#14

ID: 997bec28

The perimeter of an isosceles triangle is 83 inches. Each of the two congruent sides of the triangle has a length of 24 inches. What is the length, in inches, of the third side?

#15

ID: 40ba6288

If $3x = 30$, what is the value of $3x - 12$?

- A) -2
- B) 18
- C) 22
- D) 42

#16

ID: 6ac23de7

$$\frac{4x}{5} = 20$$

In the equation above, what is the value of x ?

- A) 25
- B) 24
- C) 16
- D) 15

#17

ID: 7392dfc1

Which of the following is equivalent to $4x + 6 = 12$?

- A) $2x + 4 = 6$
- B) $x + 3 = 3$
- C) $3x + 2 = 4$
- D) $2x + 3 = 6$

#18

ID: 93954cfa

One pound of grapes costs \$2. At this rate, how many dollars will c pounds of grapes cost?

- A) $2c$
- B) $2 + c$
- C) $\frac{2}{c}$
- D) $\frac{c}{2}$

#19

ID: 3d04de9c

A principal used a total of 25 flags that were either blue or yellow for field day. The principal used 20 blue flags. How many yellow flags were used?

- A) 5
- B) 20
- C) 25
- D) 30

#20

ID: 60f71697

$$8x = 88$$

What value of x is the solution to the given equation?

- A) 11
- B) 80
- C) 96
- D) 704

#23

ID: e7b6f0d1

$$4x + 6 = 18$$

Which equation has the same solution as the given equation?

- A) $4x = 108$
- B) $4x = 24$
- C) $4x = 12$
- D) $4x = 3$

#21

ID: 4de87c9a

3 more than 8 times a number x is equal to 83 . Which equation represents this situation?

- A) $(3)(8)x = 83$
- B) $8x = 83 + 3$
- C) $3x + 8 = 83$
- D) $8x + 3 = 83$

#24

ID: 8339793c

Nasir bought 9 storage bins that were each the same price. He used a coupon for \$63 off the entire purchase. The cost for the entire purchase after using the coupon was \$27 . What was the original price, in dollars, for 1 storage bin?

#22

ID: 12b04e68

A total of 165 people contributed to a charity event as either a donor or a volunteer. 130 people contributed as a donor. How many people contributed as a volunteer?

- A) 35
- B) 130
- C) 165
- D) 330

#25

ID: 550b352c

$$10 = 2x + 4$$

How many solutions exist to the equation shown above?

- A) None
- B) Exactly 1
- C) Exactly 3
- D) Infinitely many

#26

ID: 87071893

$$x + 40 = 95$$

What value of x is the solution to the given equation?

#27

ID: b4553284

If $2x = 12$, what is the value of $9x$?

#28

ID: ed18c4f7

Cathy has n CDs. Gerry has 3 more than twice the number of CDs that Cathy has. In terms of n , how many CDs does Gerry have?

- A) $3n - 2$
- B) $3n + 2$
- C) $2n - 3$
- D) $2n + 3$

#29

ID: 0d685865

If $x = 7$, what is the value of $x + 20$?

- A) 13
- B) 20
- C) 27
- D) 34

#30

ID: 12255364

A gym charges its members a onetime \$ 36 enrollment fee and a membership fee of \$ 19 per month. If there are no charges other than the enrollment fee and the membership fee, after how many months will a member have been charged a total of \$ 188 at the gym?

- A) 4
- B) 5
- C) 8
- D) 10

#31

ID: b82a943c

If $7x = 28$, what is the value of $8x$?

- A) 21
- B) 32
- C) 168
- D) 224

#32

ID: eac739b2

If $4x + 2 = 12$, what is the value of $16x + 8$?

- A) 40
- B) 48
- C) 56
- D) 60

#33

ID: 2e98b1df

On the first day of a semester, a film club has 90 members. Each day after the first day of the semester, 10 new members join the film club. If no members leave the film club, how many total members will the film club have 4 days after the first day of the semester?

- A) 400
- B) 130
- C) 94
- D) 90

#34

ID: d9d83c02

For what value of w does $w - 10 = 2(w + 5)$?

- A) 5
- B) 0
- C) -15
- D) -20

#35

ID: da2e9202

$$16x + 30 = 190$$

Which equation has the same solution as the given equation?

- A) $16x = 30$
- B) $16x = 130$
- C) $16x = 160$
- D) $16x = 190$

#36

ID: 3c4ce699

If $6 + x = 9$, what is the value of $18 + 3x$?

#37

ID: 9fc31513

The perimeter of an isosceles triangle is 36 feet. Each of the two congruent sides of the triangle has a length of 10 feet. What is the length, in feet, of the third side?

- A) 10
- B) 12
- C) 16
- D) 18

#38

ID: 2e8cc1c0

If $4x = 3$, what is the value of $24x$?

- A) $\frac{9}{2}$
- B) 6
- C) 18
- D) 72

#39

ID: c7d7980e

$$13x = 112 - x$$

What value of x is the solution to the given equation?

#40

ID: 83fb222d

If $6n = 12$, what is the value of $n + 4$?

#41

ID: 7a987ae4

If $\frac{2n}{5} = 10$, what is the value of $2n - 1$?

- A) 24
- B) 49
- C) 50
- D) 99

#42

ID: 56e1b09e

$$2.6 + x = 2.8$$

What value of x is the solution to the given equation?

#43

ID: 9ff10b3b

If $\frac{1}{2}x - \frac{1}{6}x = 1$, what is the value of x ?

- A) -4
- B) $\frac{1}{3}$
- C) 3
- D) 6

#44

ID: 59afe8db

$$3x + 5(x + 4) = 76$$

What value of x is the solution to the given equation?

- A) 7
- B) 8
- C) 56
- D) 72

#45

ID: 4e77195b

If $2 + x = 60$, what is the value of $16 + 8x$?

#46

ID: 4f7981a0

If $3x + 2 = 8$, what is the value of $9x + 6$?

#47

ID: c841e8e8

$$k + 12 = 336$$

What is the solution to the given equation?

- A) 28
- B) 324
- C) 348
- D) 4,032

#48

ID: fbb0ea7f

A rocket contained 467,000 kilograms (kg) of propellant before launch. Exactly 21 seconds after launch, 362,105 kg of this propellant remained. On average, approximately how much propellant, in kg, did the rocket burn each second after launch?

- A) 4,995
- B) 17,243
- C) 39,481
- D) 104,895

#49

ID: c3989ef8

Henry receives a \$ 60.00 gift card to pay for movies online. He uses his gift card to buy 3 movies for \$ 7.50 each. If he spends the rest of his gift card balance on renting movies for \$ 1.50 each, how many movies can Henry rent?

- A) 10
- B) 25
- C) 35
- D) 40

#50

ID: 46f68129

A librarian has 43 books to distribute to a group of children. If he gives each child 2 books, he will have 7 books left over. How many children are in the group?

- A) 15
- B) 18
- C) 25
- D) 29

#51

ID: 56e373b3

A manager is responsible for ordering supplies for a shaved ice shop. The shop's inventory starts with 4,500 paper cups, and the manager estimates that 70 of these paper cups are used each day. Based on this estimate, in how many days will the supply of paper cups reach 1,700 ?

- A) 20
- B) 40
- C) 60
- D) 80

#52

ID: e53870b6

$$6x + k = 6x + 5$$

In the given equation, k is a constant. If the equation has infinitely many solutions, what is the value of k ?

#53

ID: 23758540

What value of p satisfies the equation $2p + 275 = 325$?

- A) 5
- B) 25
- C) 48
- D) 300

#55

ID: 70774aa4

If $5x = 20$, what is the value of $15x$?

- A) 7
- B) 12
- C) 23
- D) 60

#54

ID: 49cd76d5

If $8x = 6$, what is the value of $72x$?

- A) 3
- B) 15
- C) 54
- D) 57

#56

ID: a9c04a21

What is the solution to the equation $2x + 3 = 7$?

- A) 1
- B) 1.5
- C) 2
- D) 4

#57

ID: 6fa593f1

If $x = 40$, what is the value of $x + 6$?

- A) 34
- B) 40
- C) 46
- D) 64