

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 377a6aa4

If $3x - 8 = 7$, what is the value of $3x + 8$?

- A. -1
- B. 5
- C. 13
- ~~D. 23~~

$$x = 5 \rightarrow 3x + 8 = 23 //$$
$$(5)$$

Question ID 4e00f906

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 4e00f906



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

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

Question ID 3cc991d1

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 3cc991d1



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**

Question ID 4df85138

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 4df85138

$16x + 30 = 190$

Which equation has the same solution as the given equation?

A. $16x = 30$ ✗

B. $16x = 130$ ✗

✗ $16x = 160$

D. $16x = 190$ ✗

$16x = 160 //$

Question ID 5b4e020d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 5b4e020d

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

- A. 34
- B. 40
- ~~C. 46~~
- D. 64

$40 + 6 = 46 //$

Question ID 49729cb4

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 49729cb4



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

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

Question ID 20c1b21d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 20c1b21d

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

- A. 7
- B. 12
- C. 23
- ~~D. 60~~

$$5x \xrightarrow{\times 3} 15x = 60 //$$

Question ID a23c1142

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: a23c1142



$8x = 88$

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

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

Question ID 9fa4d469

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 9fa4d469

$4x + 5 = 165$

What is the solution to the given equation?

$x = 40 //$

Question ID cf5d19dc

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: cf5d19dc

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

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

$k = 21 //$

Question ID 208e8feb

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 208e8feb

$w + 7 = 357$

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

- A. 51
- ~~B. 350~~
- C. 364
- D. 3,577

$W = 350 //$

Question ID 551e171e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 551e171e

$x + 40 = 95$

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

$x = 55 //$

Question ID 16915678

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 16915678



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~~

Question ID 65d4bce5

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 65d4bce5

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

A. $(3)(8)x = 83$ ~~X~~

B. $8x = 83 + 3$ ~~X~~

C. $3x + 8 = 83$

~~X~~ $8x + 3 = 83$

$3 + 8x = 83 //$

Question ID 1cab63df

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 1cab63df

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

- A. 40
- ~~B. 48~~
- C. 56
- D. 60

$$4x + 2 \xrightarrow{\times 4} 16x + 8 = 48 //$$

Question ID c3f7afcd

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: c3f7afcd

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

$2 + x \xrightarrow{\times 8} 16 + 8x = 480 //$

Question ID b72da2e7

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: b72da2e7

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. $1.90 - 2p = 9.60$

$2 + 1.9p = 9.6 //$

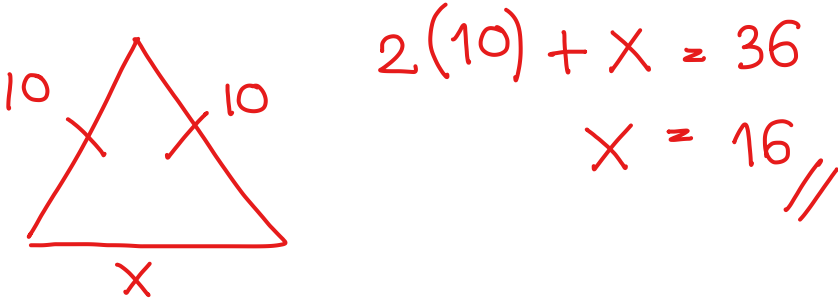
Question ID 8aa9a086

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 8aa9a086

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



Question ID 46eabc75

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 46eabc75

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

$$4,500 - 70x = 1,700$$
$$x = 40 //$$

Question ID f0684572

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: f0684572

$k + 12 = 336$

What is the solution to the given equation?

- A. 28
- ~~B. 324~~
- C. 348
- D. 4,032

$k = 324 //$

Question ID 78cad658

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 78cad658

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?

$$\begin{aligned} 9x - 63 &= 27 \\ x &= 10 // \end{aligned}$$

Question ID b9a1b79d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: b9a1b79d

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

- A. 13
- B. 20
- ~~C. 27~~
- D. 34

$7 + 20 = 27$

Question ID d1bdce45

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: d1bdce45



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

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

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

Question ID f0e167d1

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: f0e167d1

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

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$\frac{x}{8} \rightarrow \frac{8}{x} = \frac{1}{5} = 0.2$

Question ID c700f3b2

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: c700f3b2



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?

Question ID 5fcc71c6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 5fcc71c6

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

- A. -2
- ~~B. 18~~
- C. 22
- D. 42

$$x = 10$$
$$3x - 12 = 18$$
$$(10)$$

Question ID 0ed7f9ed

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 0ed7f9ed

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

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

$\times 6$
 $4x \rightarrow 24x = 18 //$

Question ID 4eb9696e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 4eb9696e

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

$$x = 3$$
$$6x - 1 = 17 //$$
$$(3)$$

Question ID 9bad9c95

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 9bad9c95

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

$$165 = D + V$$
$$D = 130 / V = 35 //$$

Question ID a8512111

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: a8512111

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

- A. 5
- ~~B. 25~~
- C. 48
- D. 300

$p = 25 //$

Question ID edd4942f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: edd4942f

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

- A. -24
- B. -22
- ~~C. -6~~
- D. -1

$$4x - 28 \xrightarrow{\div 4} x - 7 = -6 //$$

Question ID 675f2d28

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 675f2d28

$4x + 6 = 18$

Which equation has the same solution as the given equation?

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

$4x = 12 //$

Question ID a2a256c4

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: a2a256c4

$2.6 + x = 2.8$

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

$x = 0.2 //$

Question ID 89a62ded

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 89a62ded

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

$$6 + x \xrightarrow{\times 3} 18 + 3x = 27 //$$

Question ID 95e7152d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 95e7152d

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

$x = 6$

$9x = 54$
 $(6) \quad //$

Question ID a432107b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: a432107b

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

$$60 - 3(7.5) = 1.5x$$
$$x = 25 //$$

Question ID 1083a0a9

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 1083a0a9

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

- A. 3
- B. 15
- ~~C. 54~~
- D. 57

$$8x \xrightarrow{\times 9} 72x = 54 //$$

Question ID c066203a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: c066203a



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**

Question ID 5df78777

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 5df78777

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~~ ใช้พลังข้อเคลื่อน

B. 17,243

C. 39,481

D. 104,895

$$467,000 - 21x = 362,105$$

$$x = 4,995 //$$

Question ID b1491271

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: b1491271

$(p + 3) + 8 = 10$

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

- ~~A. -1~~
- B. 5
- C. 15
- D. 21

$$p + 11 = 10$$
$$p = -1 //$$

Question ID d53729e6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: d53729e6

$8x - 7x + 130 = 260$

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

$$x + 130 = 260$$
$$x = 130 //$$

Question ID 8725b868

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 8725b868

What value of x is the solution to the equation $16x + 24 = 24x$?

- A. -4
- B. $\frac{3}{10}$
- C. $\frac{1}{3}$

~~D. 3~~

$$\begin{aligned} -8x &= -24 \\ x &= 3 \end{aligned}$$

Question ID 5741413f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 5741413f

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

- A. 21
- ~~B. 32~~
- C. 168
- D. 224

$$x = 4$$
$$8x = 32$$
$$(4) \quad //$$

Question ID 6374e7e7

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 6374e7e7

$7(2x - 3) = 63$

Which equation has the same solution as the given equation?

~~A. $2x - 3 = 9$~~

B. $2x - 3 = 56$

C. $2x - 21 = 63$

D. $2x - 21 = 70$

$2x - 3 = 9 //$

Question ID 2097069e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: 2097069e

$13x = 112 - x$

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

$14x = 112$
 $x = 8 //$

Question ID fdd71b2a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: fdd71b2a

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. $37p + 16 = 165$

$165 = 37 + 16p //$

Question ID d9029f13

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in one variable	Easy

ID: d9029f13

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

$$\begin{aligned} n &= 2 \\ n + 4 &= 6 \\ (2) \quad & \quad // \end{aligned}$$