

Year 6 Algebra Worksheet



1. One-step Algebra

- A. $-6 + x = -14; x =$ B. $x + 2 = 8; x =$ C. $9x = -72; x =$
D. $x - 3 = 3; x =$ E. $-x = 1; x =$ F. $-3x = -15; x =$
G. $-4x = -12; x =$ H. $-2x = 4; x =$ I. $x \div -2 = 1; x =$
J. $10 \div x = -2; x =$

2. 2-Step Equations

Solve each equation

- A. $4x + 7 = 27$ $x =$ B. $x/5 - 2 = 8$ $x =$ C. $2x + 11 = 3$ $x =$
D. $x/3 + 7 = 5$ $x =$ E. $3x + 7 = 25$ $x =$ F. $x/4 - 2 = 5$ $x =$
G. $2x + 11 = 7$ $x =$ H. $x/3 + 9 = 5$ $x =$ I. $6 = x/4 + 2$ $x =$
J. $-4 = x/20 - 5$ $x =$

3.

- A. Solve for s .

$$s \times \bar{10} = 100$$

$$s =$$

- B. Solve for u .

$$\bar{49} - \bar{26} = u$$

$$u =$$

- C. Solve for n .

$$504 \div n = \bar{28}$$

$$n =$$

D. Solve for d .

$$6 + d = 28$$

$$d =$$

4. Jim wants air conditioning in his room. The air conditioner costs \$45. Each day the electricity costs \$2. Write an expression that can be used to find the cost to run the air conditioner for d days.

If Jim spent \$85 to cool his room, how many days did he run the air conditioner?

5. Addy wants to rent a movie from the video store. The membership fee is \$15 per month, plus \$4 per movie. Write an expression that can be used to find the cost to rent five videos.

If Addy spent \$103 at the video store, how many videos did she rent?

6. Alex is saving up to buy a new cell phone. He has \$45 right now, and can save \$6 each month. Write an expression that can be used to determine Alex's savings after m months.

If Billy wants to buy a phone that costs \$63, how many months does he have to save up?

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7. A gym membership costs \$12 per month, plus \$10 for each training session. Write an expression that can be used to determine the cost of attending the gym for s number of sessions.

If you spent \$62 at the gym in March, how many training sessions did you attend?

8. Alan wants to mail a package. The flat rate for mailing a package is \$4, plus \$2 per ounce. Write an expression that can be used to determine the total cost of mailing a package that weighs u ounces.

If Alan spent \$88 to mail her package, then how many ounces was the package?

9. This equation shows how the number of cakes Aleena can bake is related to the number of additional sticks of butter he buys.

$$c = 2s$$

The variable s represents the number of additional sticks of butter Aleena buys, and the variable c represents the total number of cakes he can bake. With 5 additional sticks of butter, how many total cakes can Aleena bake?

- A. 2
- B. 20
- C. 10
- D. 1

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10. This equation shows how the number of cakes Alefiya can bake is related to the number of eggs she has.

$$c = 2e$$

The variable e represents the number of eggs Alefiya has, and the variable c represents the number of cakes she can bake. With 3 eggs, how many cakes can Alefiya bake?

- A. 7
- B. 8
- C. 6
- D. 9