

## How to study for a math test

1. Go through the checklist and make sure that you know how to do everything on the list.
2. Look over your review worksheet #1 and practice similar problems from the book.
3. Try all the study problems from review worksheet #2 and check your answers.
4. If you missed any, try to find your mistake and fix it.
5. Ask questions before school or after school (do not wait until you get to class).
6. Review any missed questions before the test to make sure that you do not make the same mistakes again.

## *Chapter One Study Checklist*

Know It?		Content Topics	Extra problems to try
Yes	No	1. Solve simple equations (1.1)	p 44. #1, 2, 4, 5
Yes	No	2. Translating verbal models into equations (1.1-1.2)	p 16 #29-34
Yes	No	3. Solve multi-step equations with fractions (1.1-1.2)	p 44 # 3 & 8
Yes	No	4. Solve multi-step equations by combing like terms (1.2)	p 44 #6
Yes	No	5. Solve equations with distributing (1.2)	p 44 #8
Yes	No	6. Solve equations with variables on both sides (1.3)	p 45 #12
Yes	No	7. Infinitely many/no solution equations (1.3)	p 45 #13-14
Yes	No	8. Solve absolute value equations (1.4)	p 45 #17 p 29 # 4
Yes	No	9. Solve absolute value equations with one or no solutions (1.4)	p 32 # 20 p 28 #3
Yes	No	10. Literal equations ; solve for $y$ (1.5)	p 40 #5, 9, 13
Yes	No	11. Literal equations ; formulas, solve for the given variable (1.5)	P 46 # 22a
		Application problems (1.1-1.5)	
Yes	No	12. Angles of a polygon	p 44 #10
Yes	No	13. Word problems with rates and flat fees	p 26 #19
Yes	No	14. Formula Applications	p 38 example 5, 6, and 7
Yes	No	15. Formula Applications	p 46 #22b

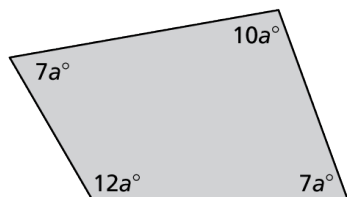
**Algebra 1**  
**Chapter 1 Review #2**

Name \_\_\_\_\_

**Solve each of the following equations. If there is no solution or infinitely many solutions, state that.**

1. $25 = \frac{m}{3}$	2. $9t - 6 - 6t = 6$	3. $4x + 22 = 4(x + 3)$
4. $15 = -r + \frac{1}{5}(5r + 75)$	5. $3x + 2x - 1 = x + 19$	6. $2(5x - 1) = 3(x + 11)$
7. $2 a + 2  + 9 = 5$	8. $ y - 4  = 11$	9. $ b - 5  + 4 = 9$

10. Find the value of the variable. Then, find each of the angle measures.



11. Translate the verbal model into an algebraic equation.

- 3 more than the product of a number and 9 is 84.
- 12 less than twice a number is 40.
- The difference of 15 and the quotient of a number and 3 is 45.



**Solve the literal equations for  $y$ .**

12. $3x + 7 = 2y - 11$	13. $-2x + 5y = 12$	14. $4x + 2x = 3y + 2y$
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**Solve the formula for the given variable.**

15. $y = \frac{x-v}{b}$ for $x$	16. $mx + nt = p$ for $x$
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17. Using the information in the table, write and solve an equation to find the number of rentals it would take in order to pay the same amount for Movie Rental A and Movie Rental B.

Rental A	Rental B
Membership fee: \$20 and \$1.5 per movie rental 	Membership fee: \$50 with no rental fee per movie. 

18. The formula for determining the force (in Newtons) needed to accelerate an object is determined by  $f = ma$ , where  $m$  is the mass of an object (in kg), and  $a$  is the acceleration rate (in m/sec).

- Solve the formula for  $m$ .
- If you needed 7500N of force for a racecar to accelerate at 3 m/sec, how much mass (kg) does the car have?

**Algebra 1**  
**Chapter 1 Review #2**

Name \_\_\_\_\_ KEY \_\_\_\_\_

1. $m=75$	2. $t=4$	3. No solution	4. Infinitely Many	5. $x=5$
6. $x=5$	7. No solution		8. $y=\{-7, 15\}$	9. $b=\{0, 10\}$
10. $a=10^0$ $70^0, 100^0, 70^0, 120^0$	11. a. $9n+3 = 84$ b. $2n-12 = 40$ c. $15-\frac{n}{3} = 45$		12. $y = \frac{3}{2}x + 9$	13. $y = \frac{2}{5}x + \frac{12}{5}$
14. $y = \frac{6x}{5}$ or $y = \frac{6}{5}x$	15. $x = by + v$	16. $x = \frac{p-nt}{m}$		17. $50 = 1.5r + 20$ $r = 20$ rentals
18. a. $m = \frac{f}{a}$ b. 2500 kg				