

Algebra Test 2

Work in your NOTEBOOK, AND SHOW ALL WORK!

1. Solve for x : $2x = 12$

2. Solve for x : $4x = 9$

3. Solve for x : $x + 6 = 14$

4. Solve for x : $x + 8 = 3$

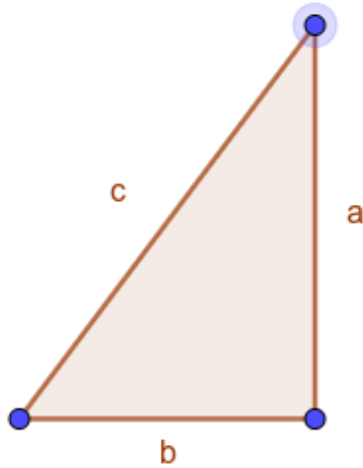
5. Solve for x : $2x + 3 = 21$

6. Solve for x : $3x - 8 = 2x + 5$

7. Multiply out and simplify: $\frac{2}{3} \times \frac{7}{5}$

8. Divide and simplify: $\frac{3}{5} \div \frac{7}{4}$

9. In the right triangle below $a = 3$ and $b = 4$, solve for c :



10. Calculate: $\sqrt{36}$

11. Calculate: $\sqrt{3^2 + 4^2}$

12. Calculate: $\sqrt{0.25}$

13. Is $x = 10$ a solution of $2x + 3 = 25$?

14. Is $x = 3$ a solution of $x^2 - 2x - 3 = 0$?

15. You buy a meal for yourself and 3 of your friends. The meals all cost the same amount. You pay with a \$20 bill and receive a \$5 bill for change.

(a) Write an equation for this situation (using materials or not)

(b) Solve the equation

(c) How much did each meal cost?

16. Write out a statement of the Pythagorean Theorem.

17. (Extra Credit): Multiply and simplify: $\frac{12}{20}$

18. (Extra Credit): Solve: $\frac{2}{3}x + 1 = 9$

19. (Extra Credit): Write a paragraph about your biography mathematician.
Include at least 3 sentences.