

Unit 1 Review for Retest**Short Answer**

1. Finlay, Alex and Jack combined their money to go a road trip. They had an average of \$75. Jack had \$13 more than Finlay and Alex had \$7 less than Finlay. How much did each one have?
2. Solve for y for the inequality $5x - 3y > 8$
3. Two cars have gone the same distance after traveling for 5 hours. The first car has been traveling at 60 mile per hour. The second car had a 25 mile headstart. How fast was the second car traveling.
4. What is the solution to $.5(2x - 5) = .3(2x - 5)$
5. Simplify the inequality $3(4 - x) \geq -4x + 8$
6. Michael makes \$10.50 per hour at a restaurant for a five hour shift.. On his best day he made \$185 in tips and on his worst he made \$15. Write an inequality for the variable x for the range of Michael's pay has been for a five hour shift.
7. What inequality describes all the solutions to the inequality $\frac{3}{4}x + 3y \leq 21$ when $y = 3$?
8. The perimeter of an isosceles triangle is 25 inches. The length of two of the sides can be represented by $(2x + 3)$ and the third side can be represented by $(x - 1)$. What are the dimensions of this triangle in inches.
9. What is the solution of the proportion?
$$\frac{x - 9}{14} = \frac{1}{20}$$
10. If $y = \frac{-3}{5}x + 2$, what is the value of x when $y = -7$?

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Answer Section****SHORT ANSWER**

1. $(x + 13) + (x - 7) + x = 3(75)$
Finlay = \$73; Jack = \$86; Alex = \$66
2. $y < \frac{5}{3}x - \frac{8}{3}$
3. $(60)(5) = 25 + 5x$
55 mph
4. $x = 2.5$
5. $x \geq -4$
6. $5(10.5) + 15 \leq x \leq 5(10.5) + 185$
 $\$67.50 \leq x \leq \237.50
7. $x \leq 16$
8. $2(2x + 3) + (x - 1) = 25$
11, 3
9. $\frac{97}{10}$
10. 15