

Name: _____ Period: _____ Date: _____

Inverse Variation Assignment

Solve problem involving Inverse Variation.

Variable h varies inversely as y . If $h = 5$ when $y = 20$

1. Find the constant Value.
2. Find y when $h = 2$
3. Find y when $h = 10$
4. Find y when $h = 20$
5. Find y when $h = 4$

Variable t is inversely proportional to u . If $t = 10$ when $u = \frac{1}{2}$

6. Find the Constant value
7. Find t when $u = 1$
8. Find t when $u = 5$
9. Find t when $u = 10$
10. Find t when $u = 15$

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11. If 5 men can do a painting job in 3 days, how many days will it take 8 men to do the job?

12. How long will it take a car to travel a certain distance at 60 km/ h if the same distance can be traveled in 8 hours at 40km/h.

13. Jo Anne Sits 1.5 meters from the center of a seesaw. Dianne who weights 18 kg balances the seesaw by sitting 2 meters from the center. How many kilograms does Jo Anne weight?

14. A 10 cm diameter pulley turns 54 revolutions per minute. If this connected by a belt to another pulley with a diameter of 12cm what is its speed in revolution per minute?

15. Ten thousand dollars invested at 12% interest per annum. How much should be invested at 8% interest if two investments will receive the same amount of income?

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16. The resistance of a wire varies inversely as the square of its diameter. If a wire 0.6 cm in diameter has a resistance of 10 ohms, what is the resistance of the same lengths of wire 0.2 cm in diameter?

17. If 10 carpenter can build a house in 30 days, how long will it take 12 carpenters to do the same work, provided it can be done as efficient by 12 as by 10?

18. If a man can build a fence in 32 days working 6 hours a day, in how many days could he build it working 8 hours a day?

19. A book has 480 pages when there are 23 lines on a page. How many pages will it have if it is printed with 9 more lines on a page?

20. If 3 pipe can fill a swimming pool in 1 hour and 25 minutes, how long would it take to fill the same swimming pool if 5 pipes were used?