

Algebra 0507**Chapter 3****WS #23**

Name_____

Solve. Assume y varies directly as x .

1. If $x = 4$ when $y = 3$, find y when $x = -1$.	2. If $x = -5$ when $y = 1$, find y when $x = 10$.
3. If $x = -2$ when $y = -3$, find x when $y = -6$.	4. If $x = 1$ when $y = -4$, find x when $y = 5$.
5. If $x = -2$ when $y = 3$, find y when $x = 8$.	6. If $x = 2$ when $y = -5$, find x when $y = -20$.
7. If $x = -8$ when $y = -4$, find x when $y = 12$.	8. If $y = -3$ when $x = 7$, find y when $x = 5$.

9. The circumference c of a circle varies directly as the diameter d .

a. If $c = 44$ cm when $d = 14$ cm, find c when $d = 21$.

b. If $c = 6.28$ feet when $d = 2$ ft, find d when $c = 62.8$

10. A salesperson's commission c varies directly as her sales s .

a. If $c = \$100$ when $s = \$1000$, find c when $s = \$1250$

b. If $c = \$240$ when $s = \$4000$, find s when $c = \$300$

11. If 3 men earn \$420 in day, what will 21 men working at the same wage earn in a day?

12. If a train travels 240 miles in 4 hours, how far will it go in 7 hours at the same speed?

