

Section 8.1 WS

Date _____ Period _____

- 1) If y varies directly with x , and $y = 40$ when $x = 15$, find x when $y = 64$.
- 2) If y varies directly with x , and $y = 99$ when $x = 95$, find x when $y = 20$.
- 3) If y varies directly with x , and $y = 30$ when $x = 10$, find x when $y = 34$.
- 4) If y varies directly with x , and $y = 59$ when $x = 60$, find x when $y = 43$.
- 5) If y varies directly with x , and $y = 74$ when $x = 38$, find x when $y = 14$.
- 6) If y varies directly with $x - 6$, and $y = 7$ when $x = 9$, find x when $y = 10$.
- 7) If y varies directly with $x + 2$, and $y = 2$ when $x = 5$, find x when $y = 8$.
- 8) If y varies directly with x^2 , and $y = 12$ when $x = 2$, find y when $x = 5$.

9) If y varies directly with \sqrt{x} , and $y = 25$ when $x = 3$, find x when $y = 100$.

10) If y varies directly with $x - 2$, and $y = 20$ when $x = 6$, find y when $x = 12$.

11) A real estate agent made a commission of \$6000 on a house that sold at \$150000. At this rate, what commission will the agent make on a house that sells for \$200000?

12) If the sales tax on a \$43 purchase is \$7, what would it be on a \$86 purchase?

13) In a public-opinion poll found of a sample of 600 voters, 240 favored a school bond measure. If 3600 persons vote, about how many are likely to vote for the bond measure?

14) In a pre-election poll of 480 voters, 260 favored candidate Harrison. How many of an anticipated 12,000 votes is Harrison likely to get?