

What Goes Up Must Come Down (Or Something Like That)

1. If y varies directly with x , and the constant of variation is $k = 7$, find y when $x = 4$.
2. If y varies directly with x , and $y = 15$ when $x = 3$, find y when $x = 4$.
3. If y varies directly with x , and $y = 13$ when $x = 39$, find y when $x = 18$.
4. If y varies directly with x , and $y = 5$ when $x = 20$, find y when $x = 16$.
5. If y varies directly with x , and the constant of variation is $k = 32$, find y when $x = 8$.
6. If y varies directly with x , and $y = 21$ when $x = 3$, find y when $x = 1$.
7. If y varies jointly as the product of x and z , and $y = 100$ when $x = 10$ and $z = 20$, find y when $x = 4$ and $z = 8$.
8. If y varies jointly as the product of x and z , and $y = 14$ when $x = 1$ and $z = 2$, find y when $x = 2$ and $z = 3$.
9. If y varies directly with x and inversely with z , and $y = 3$ when $x = 24$ and $z = 4$, find y when $x = 12$ and $z = 3$.
10. If y varies directly with x and inversely with z , and $y = 1$ when $x = 1000$ and $z = 10$, find y when $x = 30$ and $z = 1$.