

Quiz: Direct and Inverse Variation

1 Suppose F varies directly as A and N. Find the constant of proportionality when $A = 182$, $F = 365$ and $N = 80$.

2 If J varies inversely as K and $J = -148$ when $K = 28$, find J when $K = 3$.

3 If E varies directly as D, and $E = 16$ when $D = 36$, then what is E when $D = 38$?

4 If $Q = 10$ when $W = 4$, and Q varies directly as W, find Q when $W = 14$.

5 Variable A varies directly and directly with P and Q. If $A = 42$ when $P = 8$ and $Q = 9$, find A when $P = 44$ and $Q = 7$.

6 B varies inversely with variable S. If B is 62 when $S = 11$, find B when $S = 34$.

7 Variable L varies directly and jointly with A and Q. If $L = 402$ when $A = 18$ and $Q = 14$, find L when $A = 10$ and $Q = 32$.

8 If E varies directly as D, and $E = 94$ and $D = 8$, then find the constant of proportionality

9 The number of hours, h, it takes for a block of ice to melt varies inversely as the temperature, t. If it takes 4 hours for a square inch of ice to melt at 32° , find the constant of proportionality.

10 The weight of a body varies inversely as the square of its distance from the center of the earth. If the radius of the earth is 9200 miles, how much would a 260-pound man weigh 1800 miles above the surface of the earth?

Circle # Correct	0	1	2	3	4	5	6	7	8	9	10
Percentage Score	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%