LESSON 10-5 Variation Functions

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Combined Variation

Name in English

1. y varies directly as x and inversely as z. If y = 5 when x = 3 and z = 4, find y when x = 6 and z = 8.\
   a) 5
   b) 4
   c) 6
   d) 2

2. The number of girls varied directly as the number of boys and inversely as the number of teachers. When there were 50 girls, there were 20 teachers and 10 boys. How many boys were there when there were 10 girls and 100 teachers?
   a) 8
   b) 10
   c) -10
   d) 11

3. The number of rabbits varied directly as the number of squirrels and inversely as the number of cats. When there were 10 rabbits and 40 squirrels there were only 2 cats. How many cats went with 5 rabbits and 20 squirrels?
   a) 3
   b) 4
   c) 2
   d) 10

4. . Suppose a varies directly as b, and a varies inversely as c. Find b when $a = 8$ and $c = -3$, if $b = 16$ when $c = 2$ and $a = 4$.

   a) 20
   b) 16
   c) 4
   d) -48

LIVEWORKSHEETS