

mutate () creates new variables from existing ones

```
flights_sml <- select(flights,  
  year:day,  
  ends_with("delay"),  
  distance,  
  air_time  
)  
mutate(flights_sml,  
  gain = dep_delay - arr_delay,  
  speed = distance / air_time * 60
```

```
#> # A tibble: 336,776 x 9  
#>   year month   day dep_delay arr_delay distance air_time  gain speed  
#>   <int> <int> <int>   <dbl>   <dbl>   <dbl>   <dbl> <dbl> <dbl>  
#> 1  2013     1     1         2        11    1400    227    -9   370.  
#> 2  2013     1     1         4        20    1416    227   -16   374.  
#> 3  2013     1     1         2        33    1089    160   -31   408.  
#> 4  2013     1     1        -1       -18    1576    183    17   517.  
#> 5  2013     1     1        -6       -25     762    116    19   394.  
#> 6  2013     1     1        -4        12     719    150   -16   288.  
#> # ... with 3.368e+05 more rows
```

transmute () only keeps the new columns

```
transmute(flights,  
  gain = dep_delay - arr_delay,  
  hours = air_time / 60,  
  gain_per_hour = gain / hours  
)
```

```
#> # A tibble: 336,776 x 3  
#>   gain hours gain_per_hour  
#>   <dbl> <dbl>         <dbl>  
#> 1     -9  3.78         -2.38  
#> 2    -16  3.78         -4.23  
#> 3    -31  2.67        -11.6  
#> 4     17  3.05          5.57  
#> 5     19  1.93          9.83  
#> 6    -16  2.5          -6.4  
#> # ... with 3.368e+05 more rows
```