

Model	b_0 (GPA points)	b_{SAT} $\left(\frac{\text{GPA points}}{\text{SAT point}}\right)$	$b_{\text{HS.PERC}}$ $\left(\frac{\text{GPA points}}{\text{percentile point}}\right)$	$b_{\text{HS.SIZE}}$ $\left(\frac{\text{GPA points}}{100 \text{ students}}\right)$
Model 1	2.65	—	—	—
Model 2	0.66	0.0019	—	—
Model 3	1.28	—	0.017	—
Model 4	2.68	—	—	−0.011
Model 5	0.083	0.0015	0.014	−0.023

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$\widehat{\text{GPA}} =$

 $+$

 \times SAT
 $+$

 \times HS.PERC
 $+$

 \times HS.SIZE

Term	Coef	SE Coef	T-Value	P-Value
Constant	0.08346	0.07035	1.186	0.236
SAT	0.001493	0.00006525	22.879	0.000
HS.PERC	0.01357	0.0005482	24.745	0.000
HS.SIZE	−0.02307	0.005027	−4.589	0.000

Overall P -value for the Multiple Linear Regression: $< 2.2 \times 10^{-16}$

Approximate 95% Confidence Interval:
 $\text{Coef} \pm 2 \times \text{SE Coef}$

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P-value for the test:

$H_0 : \beta_{\text{SAT}} = 0$ with HS.PERC and HS.SIZE in model

$H_1 : \beta_{\text{SAT}} \neq 0$ with HS.PERC and HS.SIZE in model

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Overall P -value for the Multiple Linear Regression: $< 2.2 \times 10^{-16}$

P -value for the test:

$$H_0 : \beta_{\text{SAT}} = \beta_{\text{HS.PERC}} = \beta_{\text{HS.SIZE}} = 0$$

H_1 : one or more of β_{SAT} , $\beta_{\text{HS.PERC}}$, or $\beta_{\text{HS.SIZE}}$ is non-zero

Model	S	R-sq	R-sq(adj)
1	0.6586	0.0%	0.0%
2	0.6012	16.70%	16.68%
3	0.5952	18.36%	18.34%
4	0.6584	0.08156%	0.0574%
5	0.5602	27.71%	27.66%