Algebra 1 SOL Review Session – Day 7

Independent Practice

Which equation best represents the data set $\{(-4,-4.8),(-3,-8.2),(-2,-9.1),(-1,-8.1),(0,-4.7),(1,0.3)\}$?

A $y = 1.1x^2 + 4.2x + 4.9$

B $y = 1.1x^2 + 4.2x - 4.9$

C $y = 1.1x - 4.2$

D $y = 1.1x + 4.2$

Consider the data set: $\{(-5, 9), (2, 31), (9, 143), (11, 151), (0, 42), (5, 97)\}$

Using the equation of the line of best fit, which number is the best prediction of the output when the input is 13?

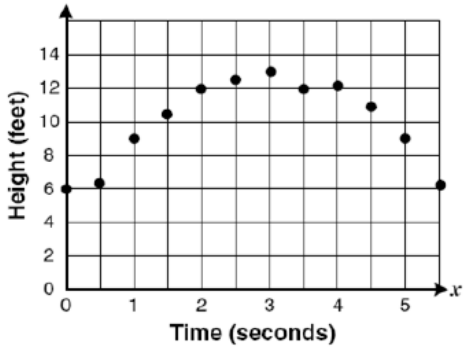
A. 127

B. 170

C. 159

D. 178

Larry made a scatterplot showing the apparent height of a football at one-second intervals during the time period the ball was in the air.



Which is most likely the equation for the curve of best fit for the relationship?

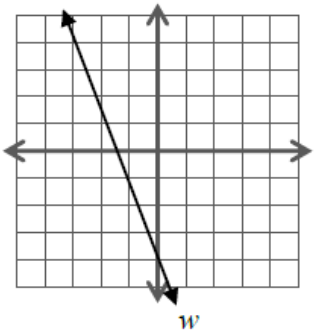
F $y = -0.4x + 9.0$

G $y = 9.0x + 0.4$

H $y = 5.3x^2 - 0.9x + 4.9$

J $y = -0.9x^2 + 5.3x + 4.9$

Which equation best represents line w ?



A. $y=-8x-4$

B. $y=-\frac{8}{3}x+4$

C. $8x+3y=-12$

D. $3x+8y=-12$

Which is the equation for the line that passes through $\left(\frac{1}{2},-2\right)$ and has a slope of 4 ?

A. $y=4x-\frac{1}{2}$

C. $y=-4x+4$

B. $y=4x-3$

D. $y=4x-4$

What is an equation of a line that passes through the points $(0,1)$ and $(6,-1)$?

A. $y=5x-1$

C. $-x+3y=3$

B. $y=-\frac{1}{3}x+1$

D. $y=\frac{1}{3}x+1$

Which line is perpendicular to the line $-x+y=2$?

A. $y=\frac{1}{2}x+4$

C. $y=-x+2$

B. $y=x+9$

D. $y=-\frac{1}{2}x-6$

Which line is parallel to the line $y=-\frac{1}{4}x+2$?

A. $4x-y=-8$

C. $2x-4y=8$

B. $x+4y=12$

D. $4x+2y=20$

Which is equivalent to $\sqrt{50x^2y^7z^8}$?

A $5xy^3z^4\sqrt{2y}$

B $5xy^3z^4\sqrt{10y}$

C $25xy^3z^4\sqrt{y}$

D $5x^2y^6z^8\sqrt{2y}$

Which is equivalent to $\sqrt[3]{27x^6y^3}$?

A. $3x^2y\sqrt[3]{xy}$

B. $9x^2y$

C. $3x^2\sqrt[3]{y}$

D. $3x^2y$