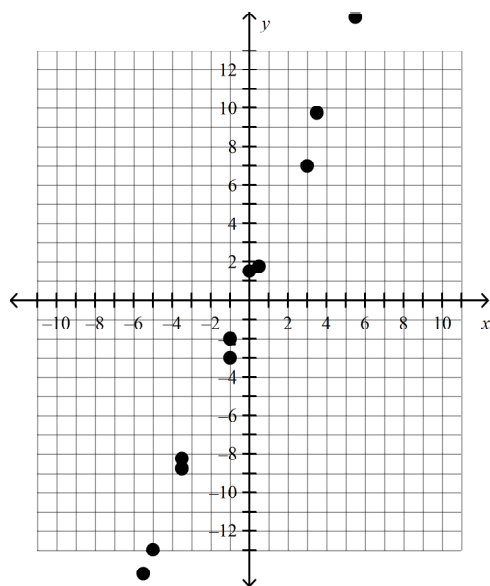
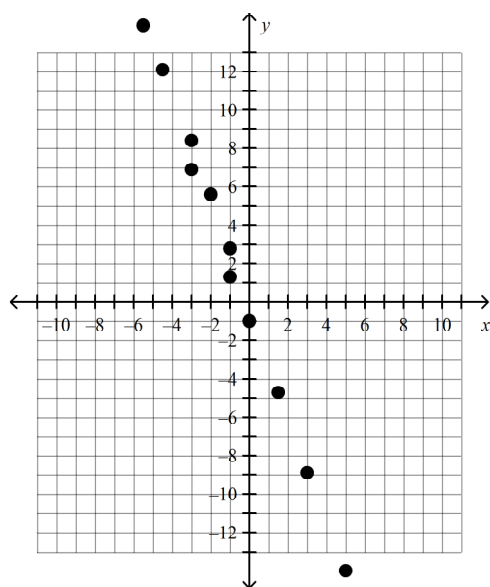


Algebra II Practice Quiz 2.7**Short Answer**

1. (10 points) Estimate the value of r for the scatter plot.

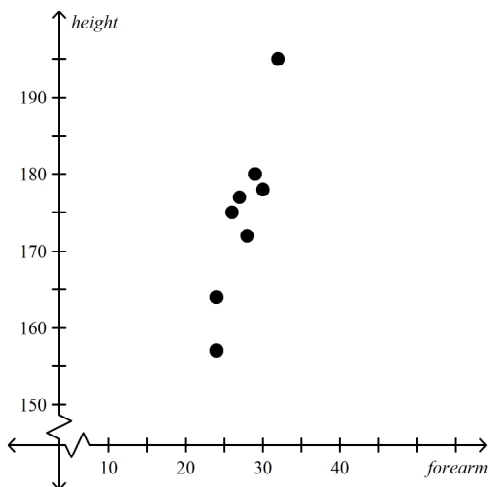


2. (10 points) Estimate the value of r for the scatter plot.



3. (10 points) There is a known relationship between forearm length (f) and body height (h). The table and accompanying scatter plot show arm lengths and heights from a randomly selected sample of people. Find the correlation coefficient r and the equation of the line of best fit.

Forearm length (cm)	24	27	24	26	32	30	29	28
Body height (cm)	157	177	164	175	195	178	180	172



4. (10 points) Using the equation for the line of best fit for the relationship between forearm length and body height, calculate the answer for each:

A). What would be the predicted body height of someone with a forearm length of 21 cm?

B). What would be the predicted forearm length of someone with a body height of 210 cm?

Name: _____

ID: A

5. (10 points) The data set shows the amount of funds raised and the number of participants in the fundraiser at the Family House organization branches. Make a scatter plot of the data with number of participants as the independent variable. Then, find the correlation coefficient and the equation of the line of best fit.

Family House Fundraiser								
Number of participants	6	10	15	20	25	13	15	18
Funds raised (\$)	450	550	470	550	650	600	600	650

6. (10 points) Using the equation for the line of best fit for the relationship between number of participants and funds raised at the Family House Fundraiser, calculate the answer for each:

A). What would be the predicted amount of funds raised for 30 participants?

B). What would be the expected number of participants if \$300 were raised? Is this reasonable?

Algebra II Practice Quiz 2.7

Answer Section

SHORT ANSWER

1. ANS:
1.00

PTS: 10

2. ANS:
-1.00

PTS: 10

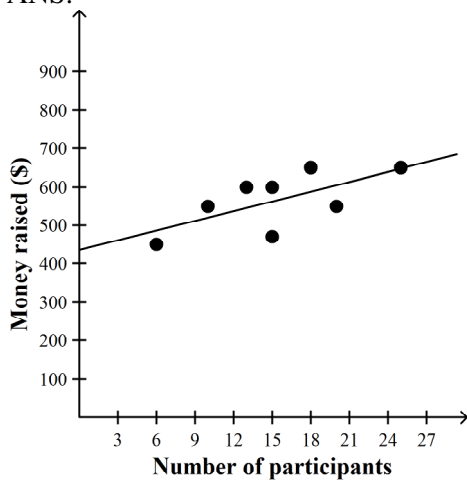
3. ANS:
 $h = 3.64f + 74.57; r = 0.83$

PTS: 10 REF: Page 144

4. ANS:
A). Check student work
B). Check student work

PTS: 10

5. ANS:



$$y = 8.5x + 435.3; r \approx 0.66$$

PTS: 10 REF: Page 145

6. ANS:
A). Check student work
B). Check student work

PTS: 10