1)

Which expression is equivalent to $\frac{y+12}{x-8} + \frac{y(x-8)}{x^2y-8xy}$?

a) $\frac{xy+y+4}{x^3y-16x^2y+64xy}$

b) $\frac{xy+9y+12}{x^2y-8xy+x-8}$

c) $\frac{xy^2+13xy-8y}{x^2y-8xy}$

d) $\frac{xy^2+13xy-8y}{x^3y-16x^2y+64xy}$

2)

Poll results:

Angel Cruz: 483

Terry Smith: 320

The data shows the result of a poll. A total of 803 voters selected at random were asked which candidate they would vote for in the upcoming election. According to the poll, if 6424 people vote in the election, by how many votes would Angel Cruz be expected to win?

a) 163

b) 1304

c) 3864

d) 5621

3) The graph of $x^2 + x + y^2 + y = \frac{199}{2}$ in the xy-plane is a circle. What is the length of the circle's radius?

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4) If $6 + x = 9$, what is the value of $18 + 3x$?

27

5)

$$y = x^2 - 14x + 22$$

The given equation relates the variables x and y. For what value of x does the value of y reach its minimum?

7

6) A circle has center O, and points R and S lie on the circle. In triangle ORS, the measure of $\angle ROS$ is 88 degree. What is the measure of $\angle RSO$, in degrees?

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