

FINDING A MAX OR MIN

FOR EACH EQUATION FIND THE RELATIVE (SOMETIMES ABSOLUTE) MAXIMUM OR MINIMUM. ALTHOUGH THE Y COORDINATE IS USUALLY CONSIDERED THE MAX OR MIN, GIVE BOTH THE X AND Y COORDINATES OF THE POINT THAT IS AT THE RELATIVE OR ABSOLUTE MAX OR MIN IN A NEIGHBORHOOD. IF THERE IS NOT ONE, WRITE NONE.

1. $Y=2X+3$

2. $X+Y=8$

3. $2X-Y=15$

4. $5X+4Y=56$

5. $Y=X^2+2X+4$

6. $Y=X^2-5X-13$

7. $Y=X^3+4X^2-5X+2$

8. $Y=-2|5x-4|+19$

9. $Y=X^4+6X^2-8$

10. $Y=12$