

1. Graph $f_1(x) = 2x + 1$. Use ctrl+T to show the table. What is y when $x = 4$?

Graphs > type function > ctrl+T

Answer: 9

2. Graph $f_1(x) = x^2 - 5$. From the table, what is y when $x = 3$?

ctrl+T, scroll to $x = 3$

Answer: 4

3. Graph $f_1(x) = x + 2$ and $f_2(x) = 2x - 1$. Find the intersection.

menu > Analyze Graph > Intersection

Bracket the point

Answer: (3, 5)

4. Graph $f_1(x) = x^2 - 4$. Find both zeros.

menu > Analyze Graph > Zero, twice

Answer: $x = -2$ and $x = 2$

5. Graph $f_1(x) = -x^2 + 6x$. Find the maximum.

menu > Analyze Graph > Maximum

Bracket the turn

Answer: (3, 9)

6. Graph $f_1(x) = 3x - 7$. From the table: what x gives $y = 8$?

ctrl+T, find $y = 8$

Answer: $x = 5$

7. Graph $f_1(x) = x^2 + 2x - 8$. Find the minimum.

Analyze Graph > Minimum

Answer: (-1, -9)

8. Graph $f_1(x) = 0.5x + 3$ and $f_2(x) = -x + 6$. Intersection?

Analyze Graph > Intersection

Answer: (2, 4)

9. Graph $f_1(x) = x^2 - 2x - 3$ and $f_2(x) = x + 1$. Find BOTH intersections. ★ challenge

Intersection twice - once per point

Check: $x^2 - 3x - 4 = 0$

Answer: (-1, 0) and (4, 5)

10. $f_1(x) = x^2 - 6x + 5$. Find the zeros AND the minimum, then explain how they relate. ★ challenge

Zeros: 1 and 5; minimum at (3, -4)

Vertex x is midway between zeros

Answer: zeros 1 & 5; min (3,-4); vertex centered