

# Funktionen in 'R<sup>2</sup>

## 9. Schulstufe

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Schwelldruckkopiervorlagen mit  
Braillebeschriftung

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Inhalt: Grafiken zu den Themen: einem x-Wert werden mehr als ein y-Wert zugeordnet, lineare Funktion, quadratische Funktion, Polynomfunktion 3. Grades, Polynomfunktion 4. Grades, gerade Funktion, ungerade Funktion, gebrochen rationale Funktion mit x im Nenner, gebrochen rationale Funktion mit  $x^2$  im Nenner, Sinusfunktion und Einheitskreis

Figure 1 consists of four diagrams labeled (a), (b), (c), and (d), each showing a different type of point pattern. Diagram (a) shows a regular grid of points. Diagram (b) shows a random distribution of points. Diagram (c) shows a distribution of points with a central cluster. Diagram (d) shows a distribution of points with a central cluster and a tail.

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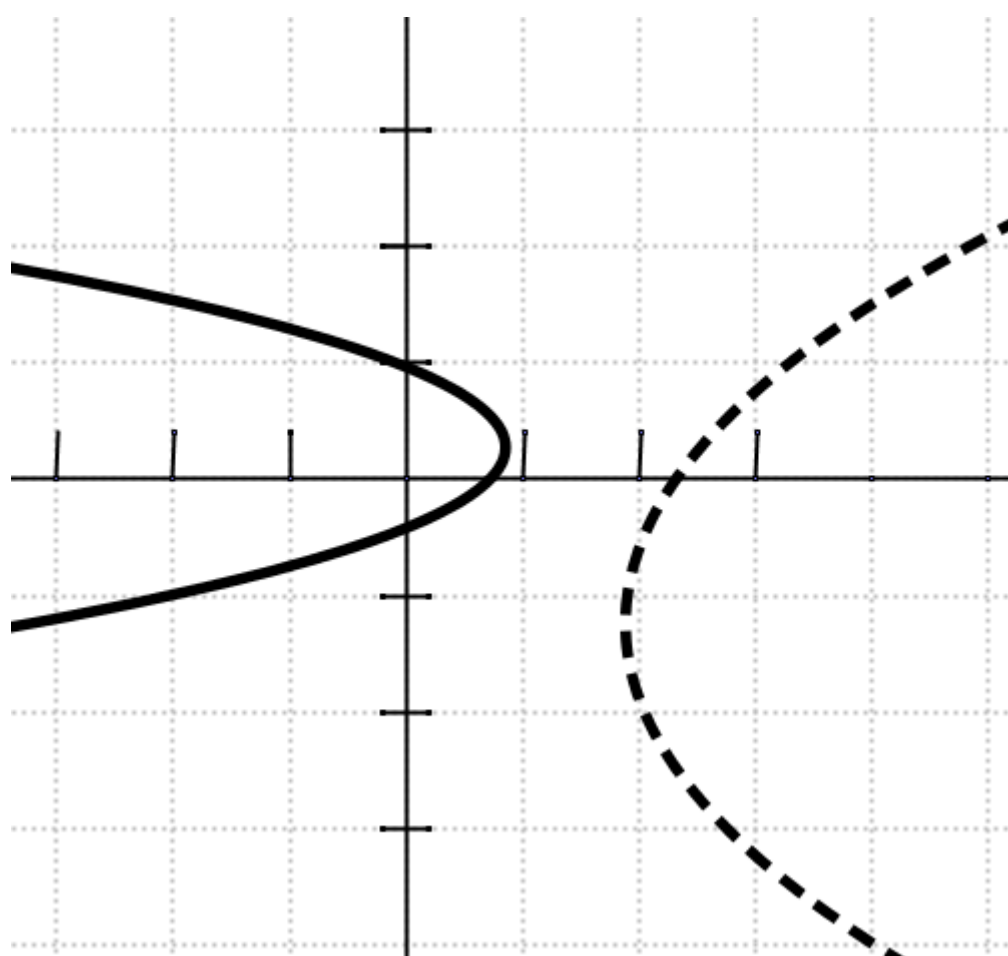
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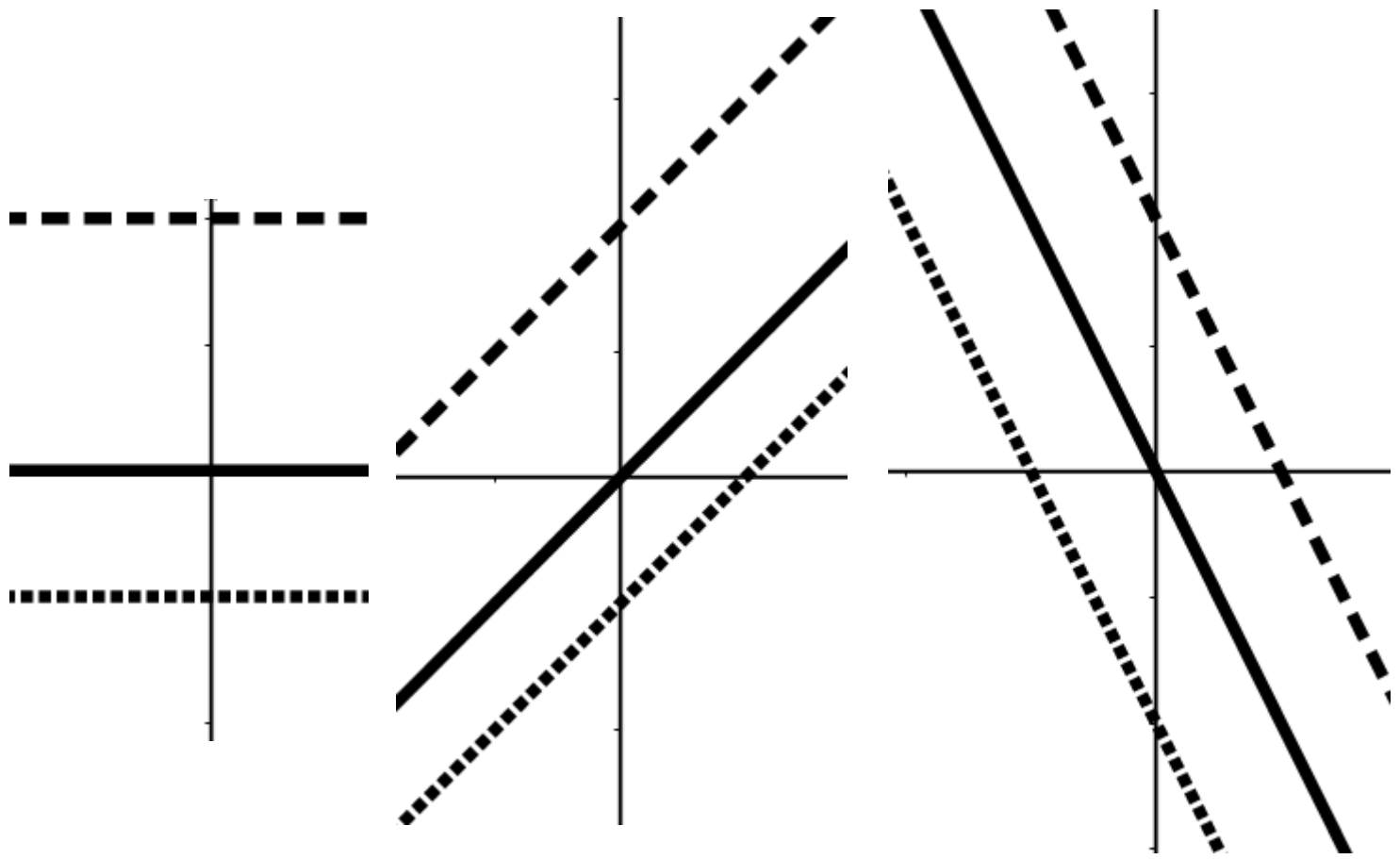
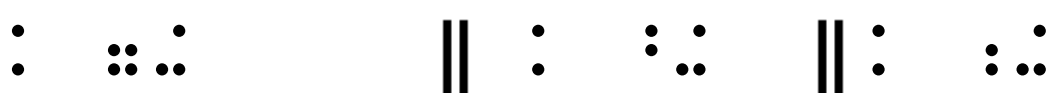
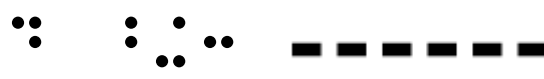
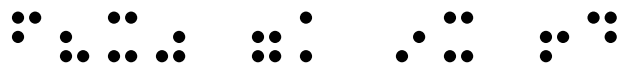
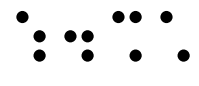
$\frac{1}{2} m v^2$

$\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + \frac{1}{2} m v_1^2$

$\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + \frac{1}{2} m v_1^2 + \frac{1}{2} m v_2^2$

$\frac{1}{2} m v^2 = \frac{1}{2} m v_0^2 + \frac{1}{2} m v_1^2 + \frac{1}{2} m v_2^2$







1. Les courbes de la parabole

2. Les courbes de la parabole

3. Les courbes de la parabole

4. Les courbes de la parabole

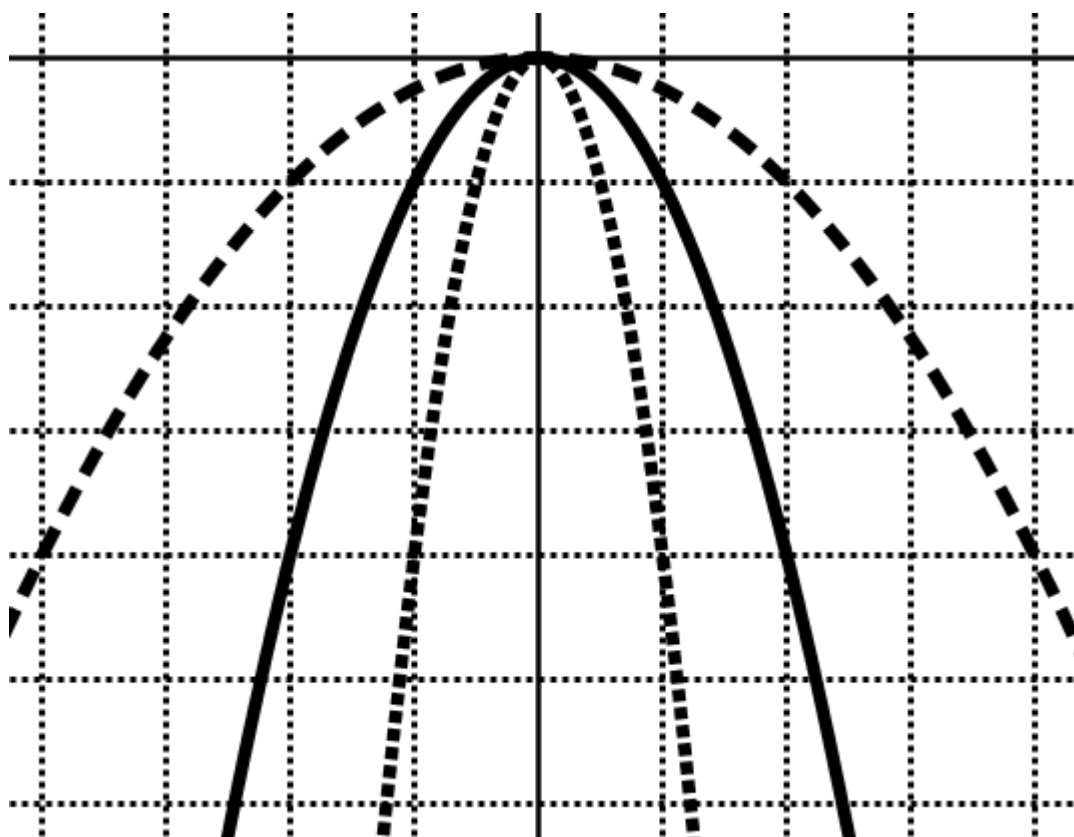
5. Les courbes de la parabole



6. Les courbes de la parabole

7. Les courbes de la parabole

8. Les courbes de la parabole





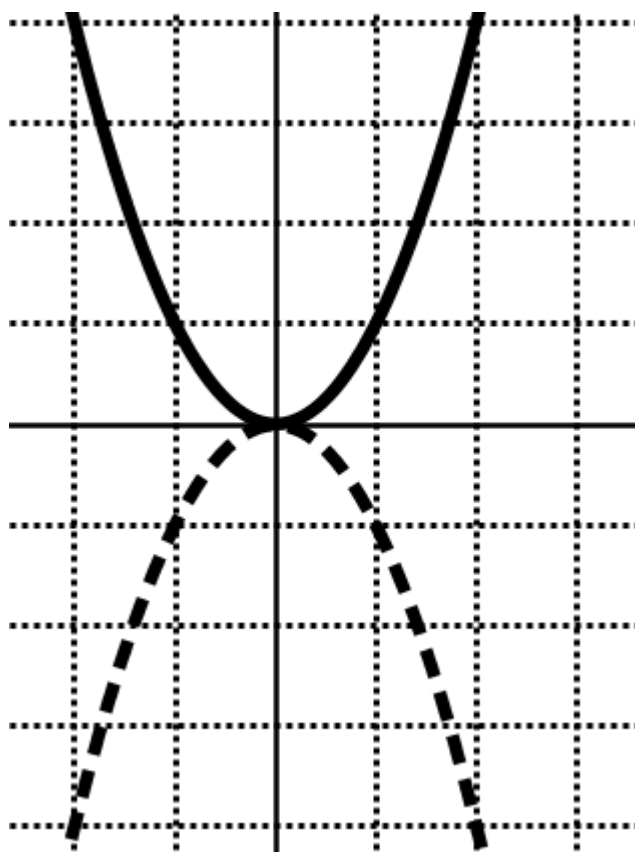
$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$



$\frac{1}{2}x^2 + \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x + \frac{1}{2}$

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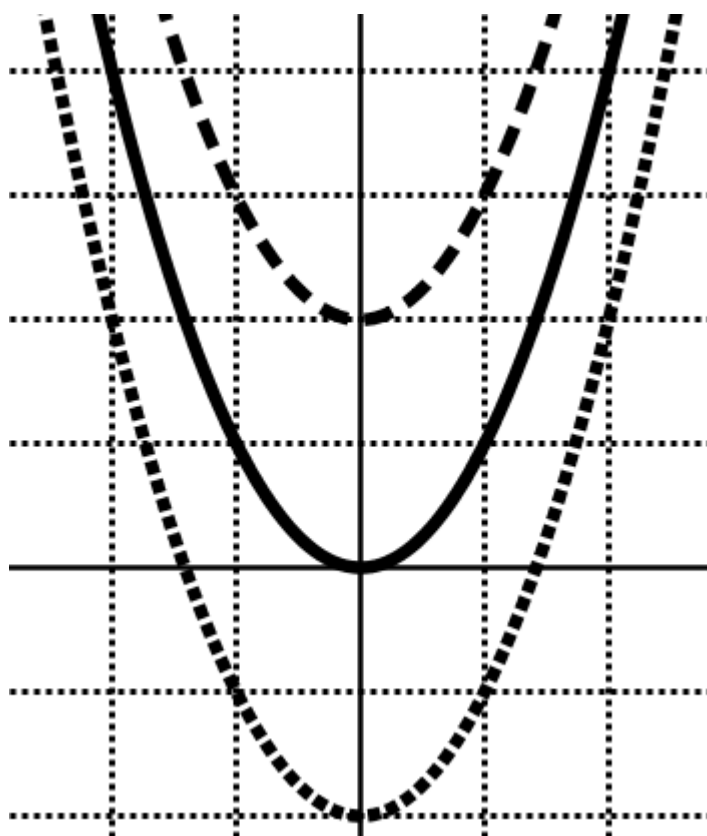
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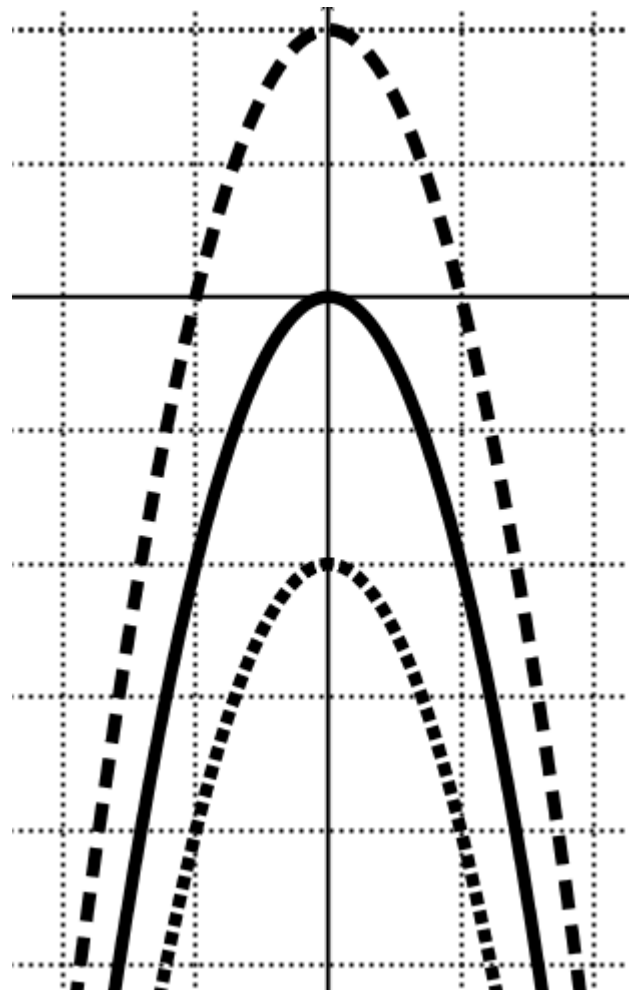
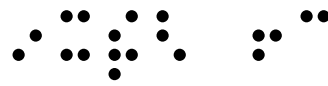
$\frac{1}{2}x^2 + \frac{1}{2}x + \frac{1}{2}$

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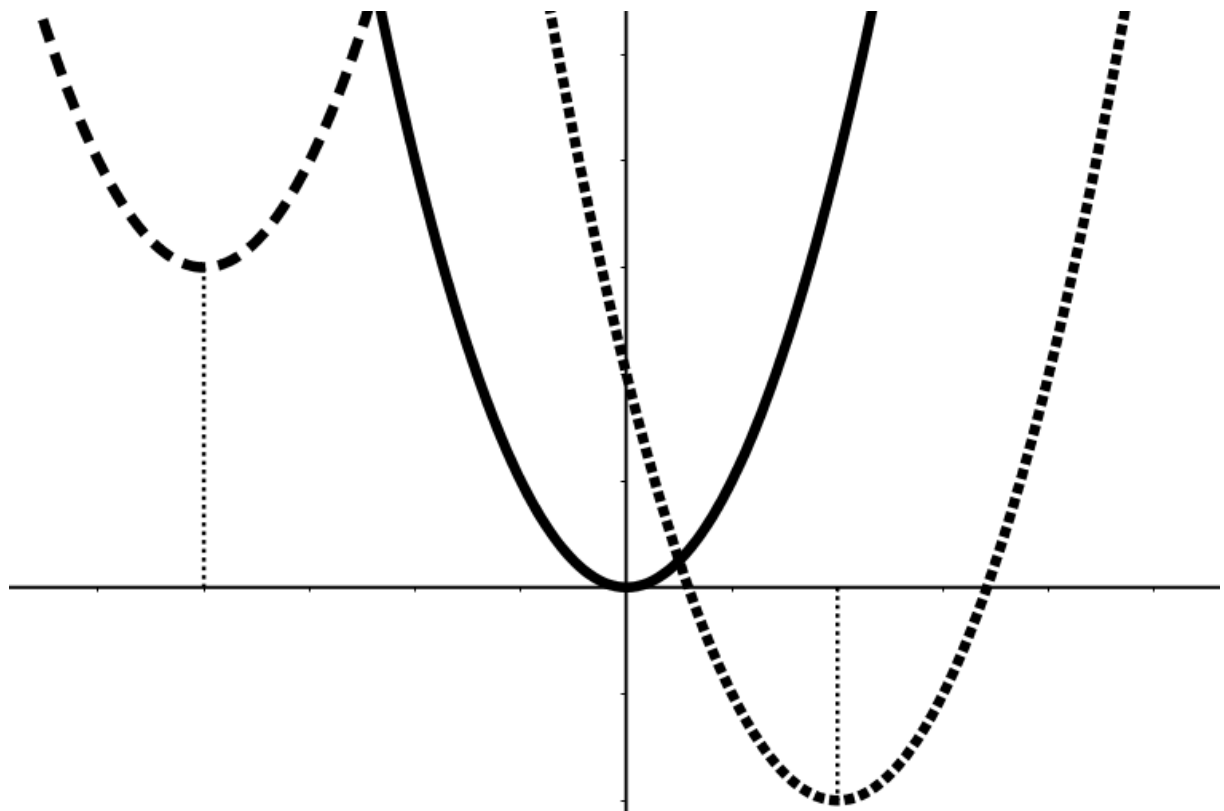


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The figure shows a 10x10 grid of cells. The pattern of black dots evolves from left to right. In the first column, there are 4 dots. In the second column, there are 5 dots. In the third column, there are 6 dots. In the fourth column, there are 7 dots. In the fifth column, there are 8 dots. In the sixth column, there are 9 dots. In the seventh column, there are 10 dots. In the eighth column, there are 9 dots. In the ninth column, there are 8 dots. In the tenth column, there are 7 dots.



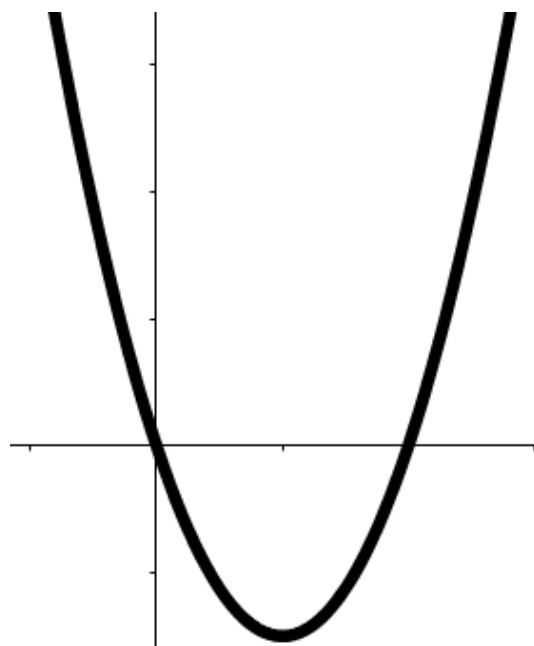
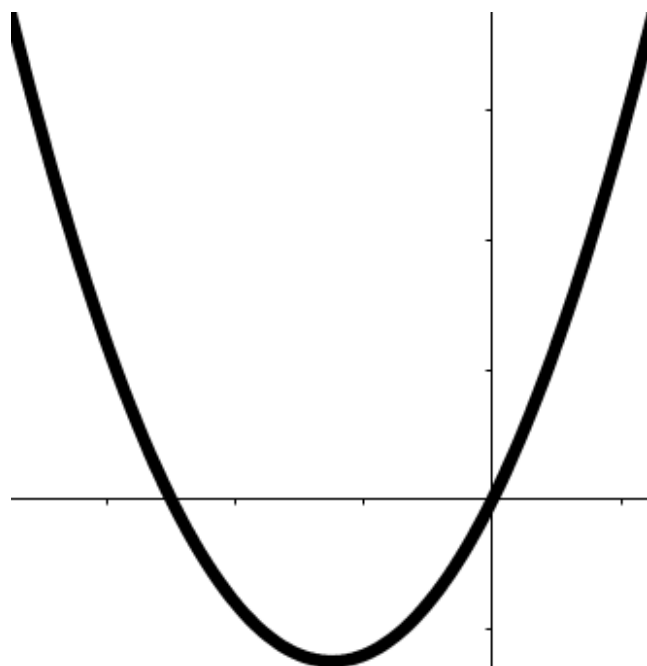
$\frac{1}{2}x^2 + \frac{3}{2}x + \frac{5}{2}$

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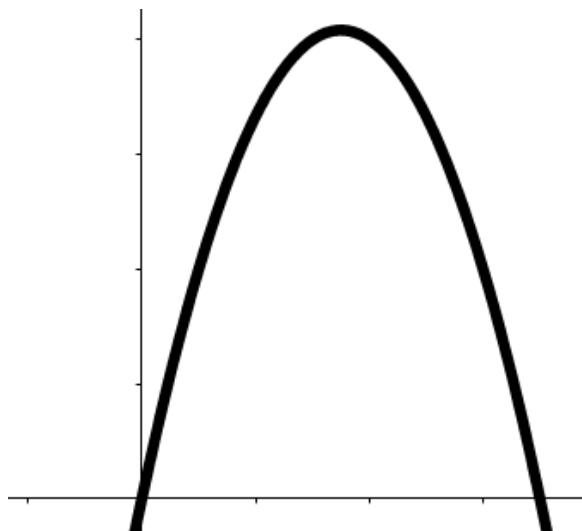
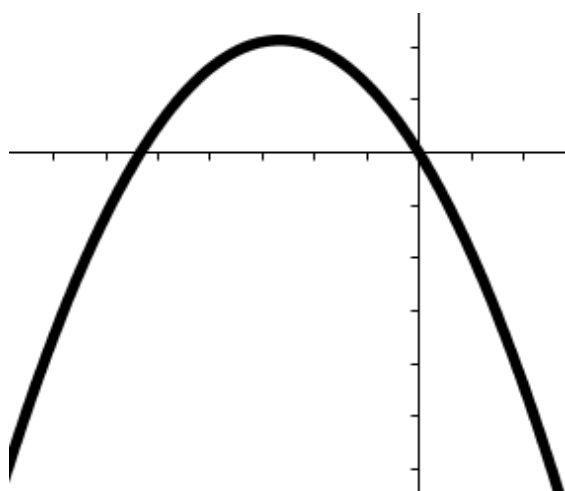
$\frac{1}{2}x^2 + \frac{3}{2}x + \frac{5}{2}$

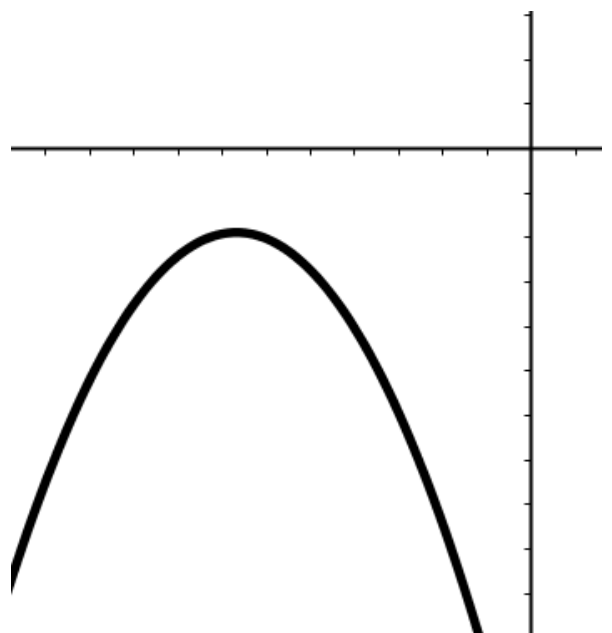
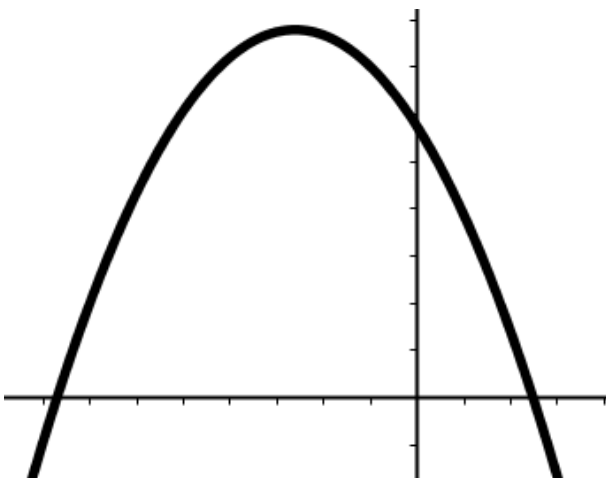
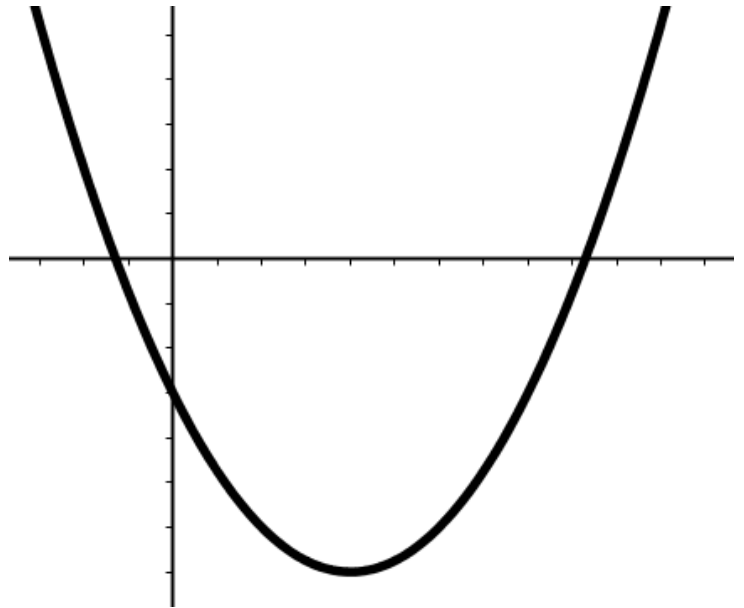
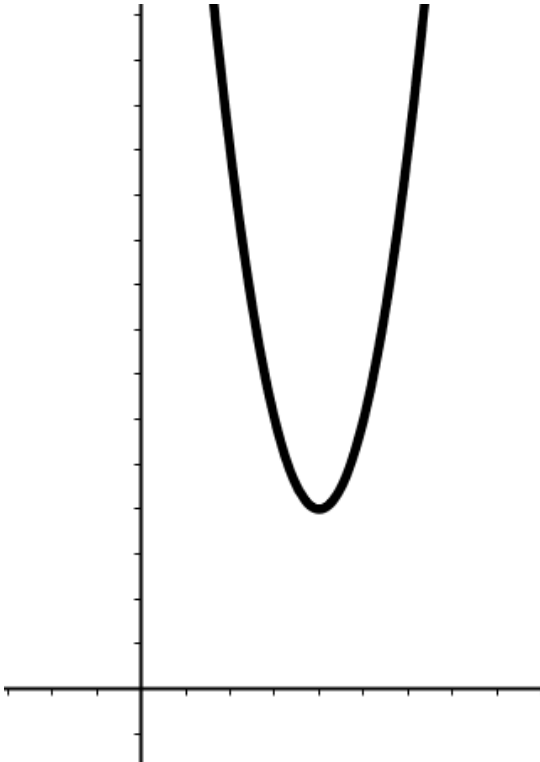
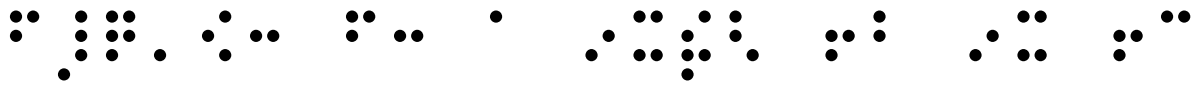
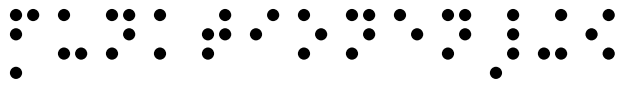
$\frac{1}{2}x^2 + \frac{3}{2}x + \frac{5}{2}$

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$\frac{1}{2}x^2 + \frac{3}{2}x + \frac{5}{2}$





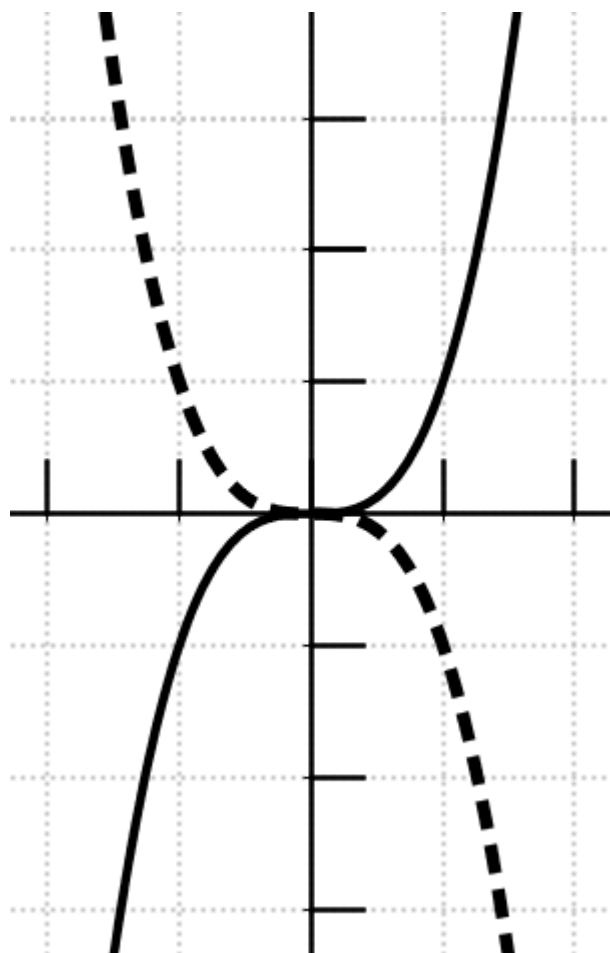
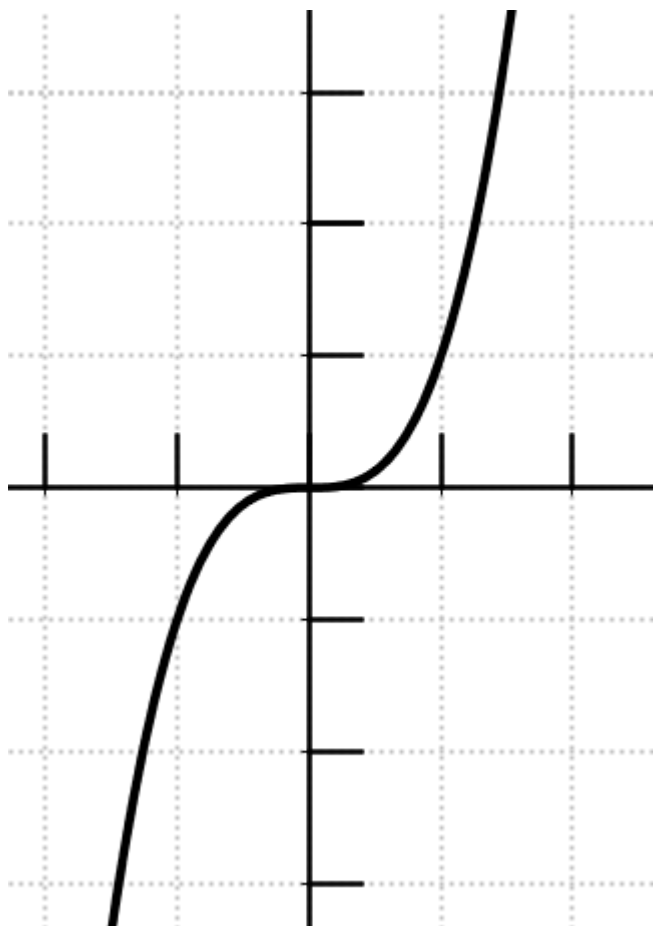
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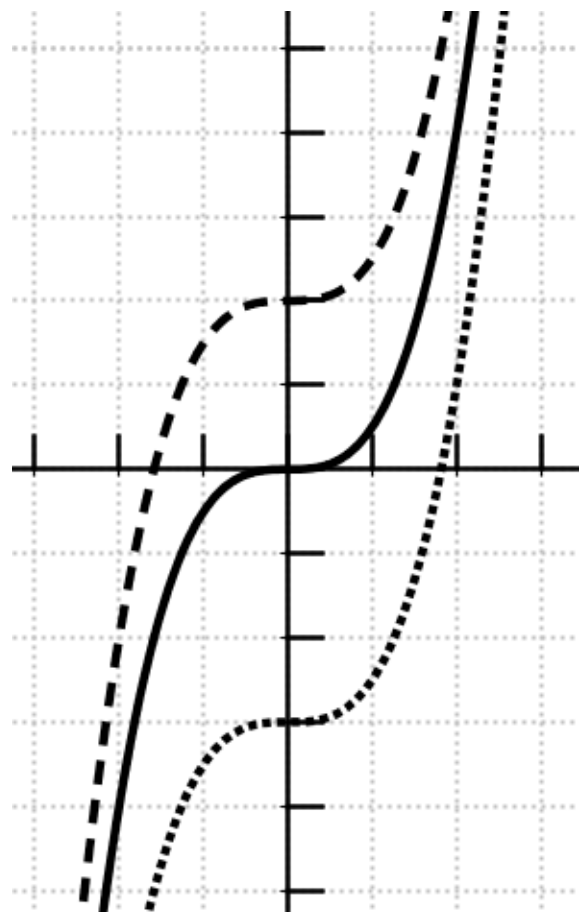
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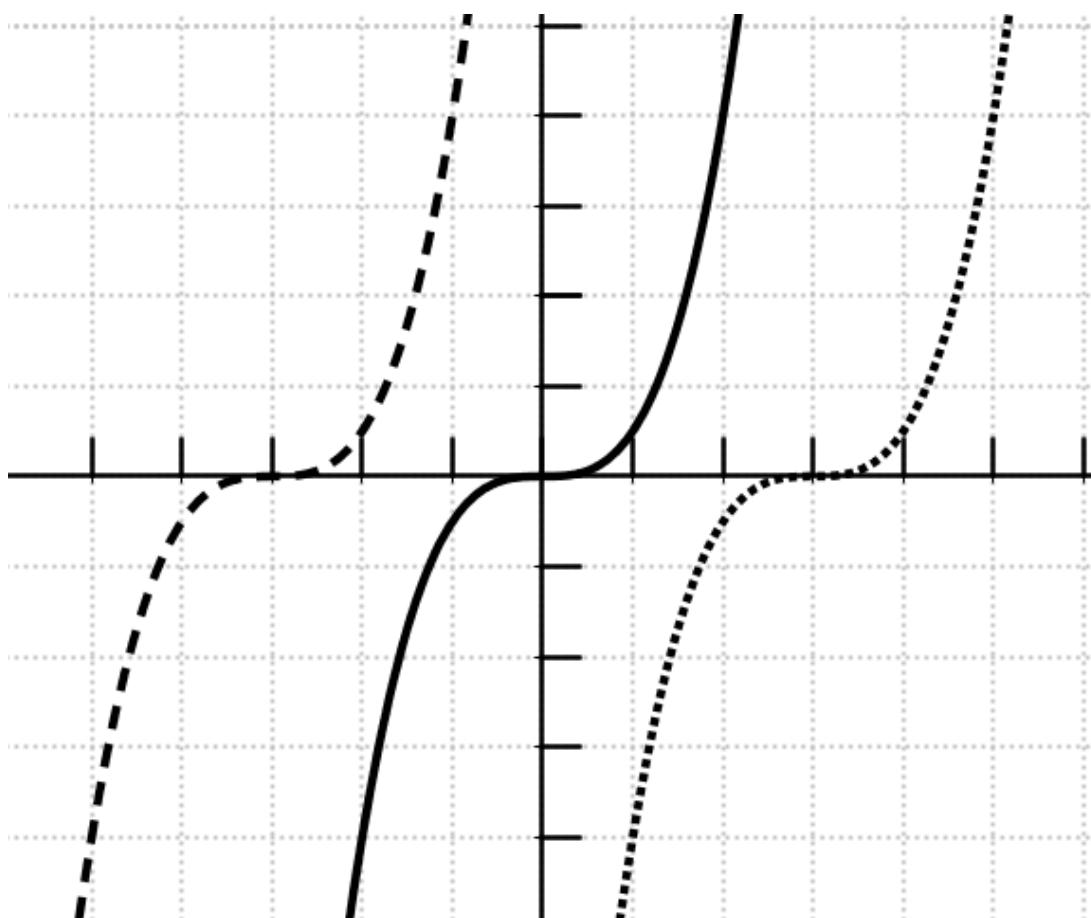
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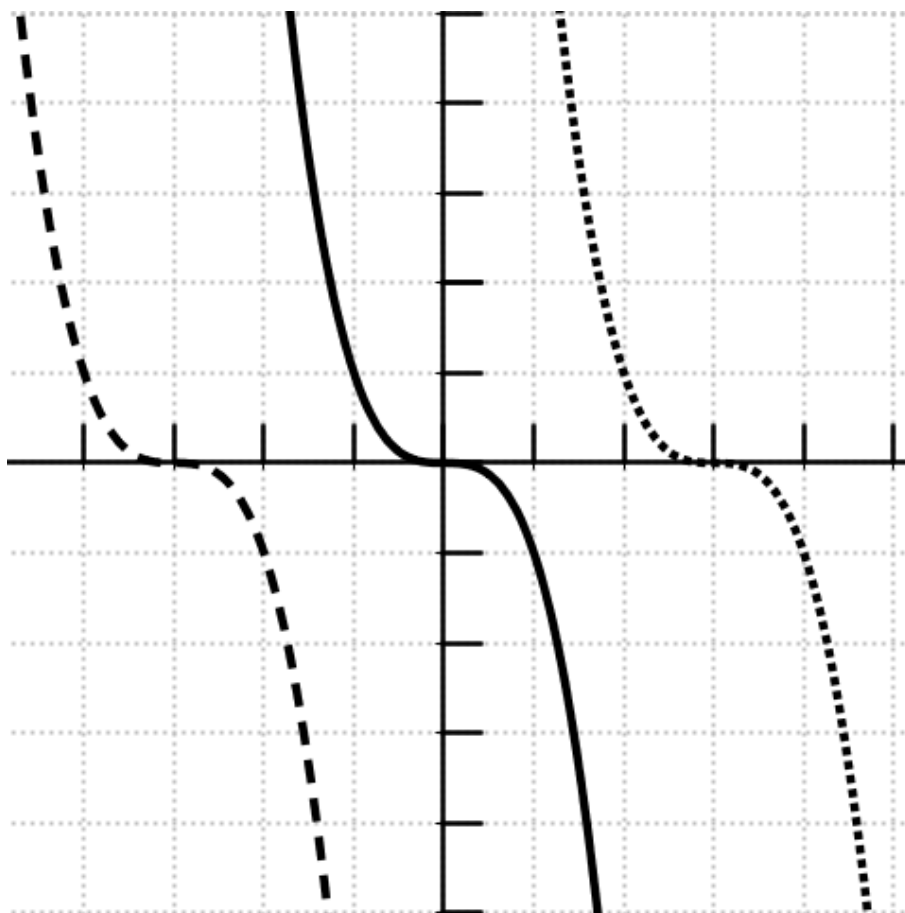
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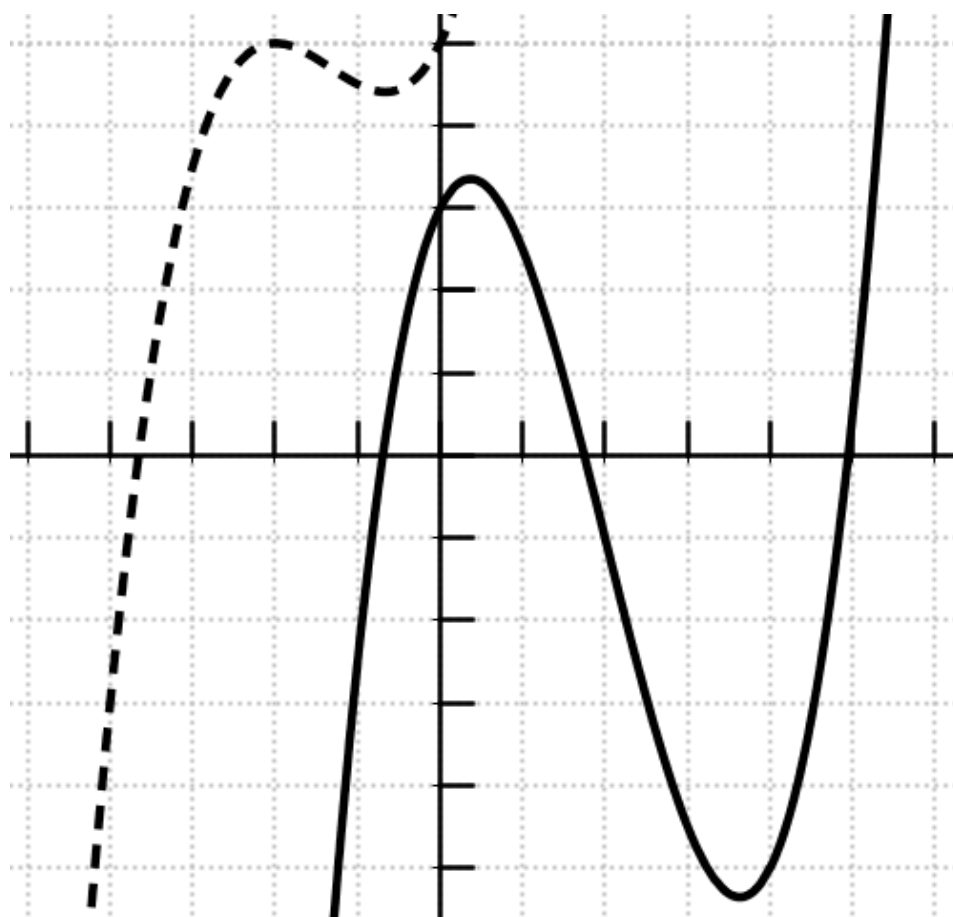
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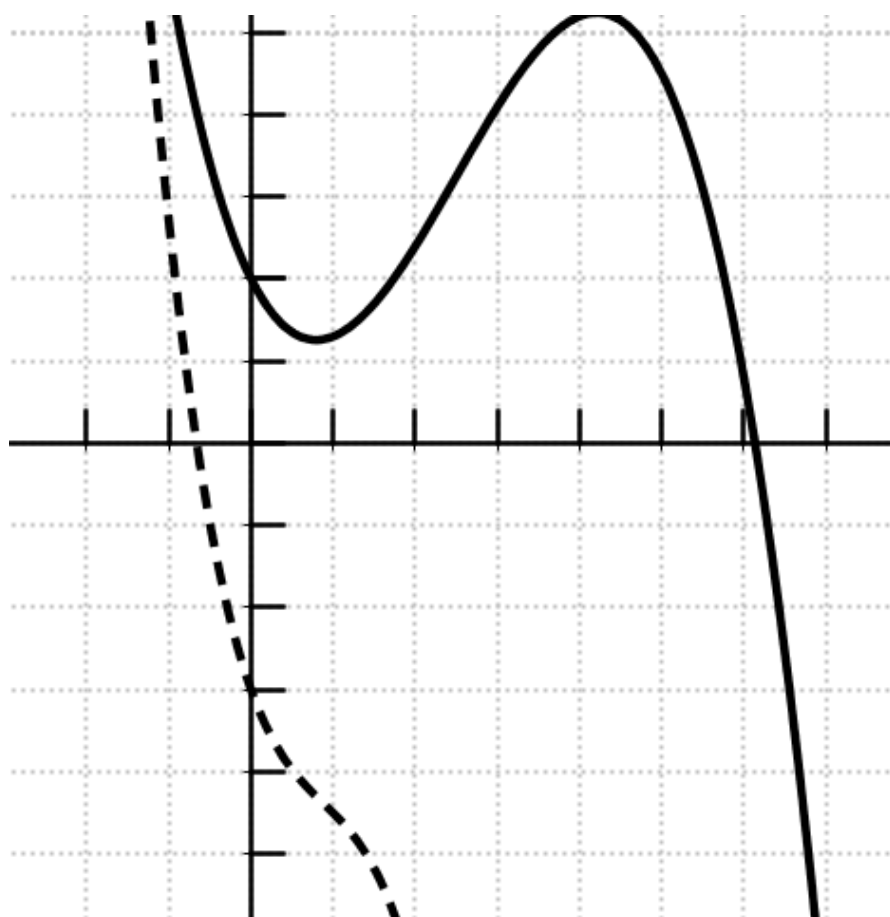
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$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

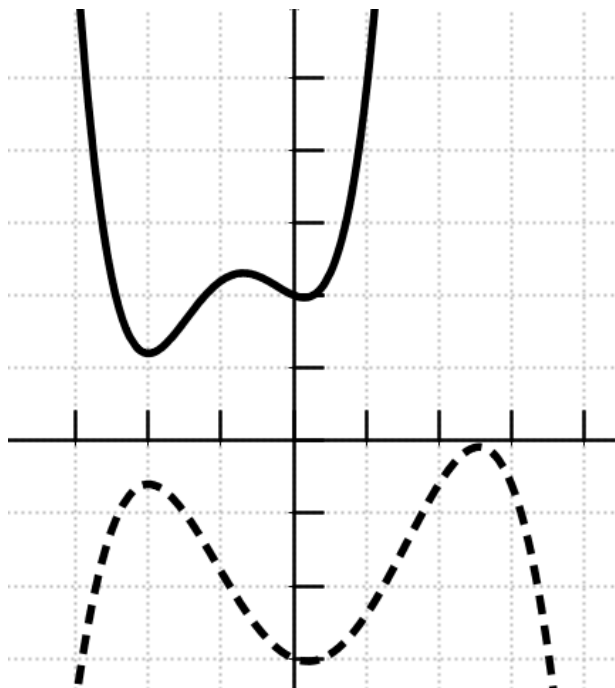
$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$

$\frac{1}{2}x^2 + \frac{1}{2}x - \frac{1}{2}$







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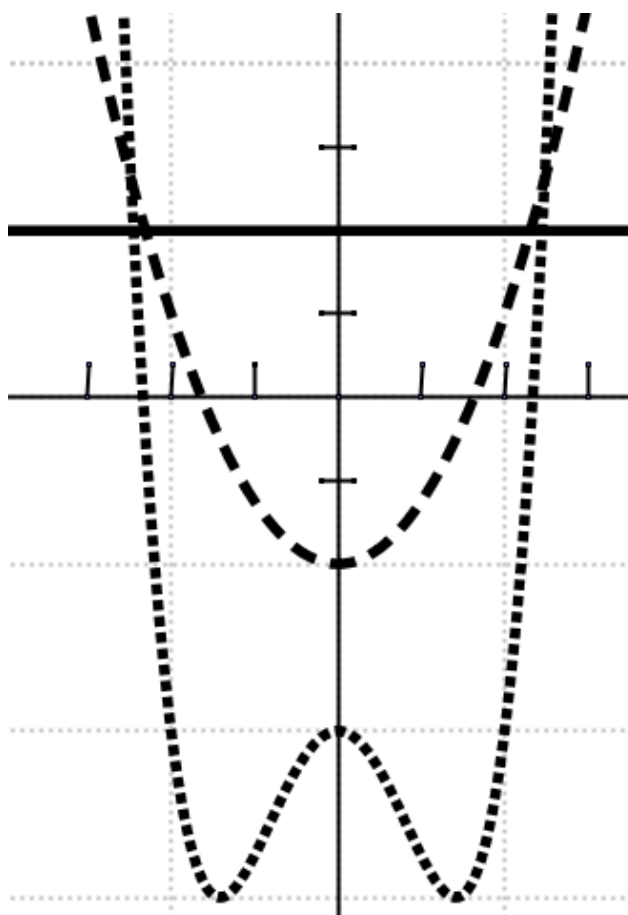
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$\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 4} = \frac{3}{8}$

$\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$

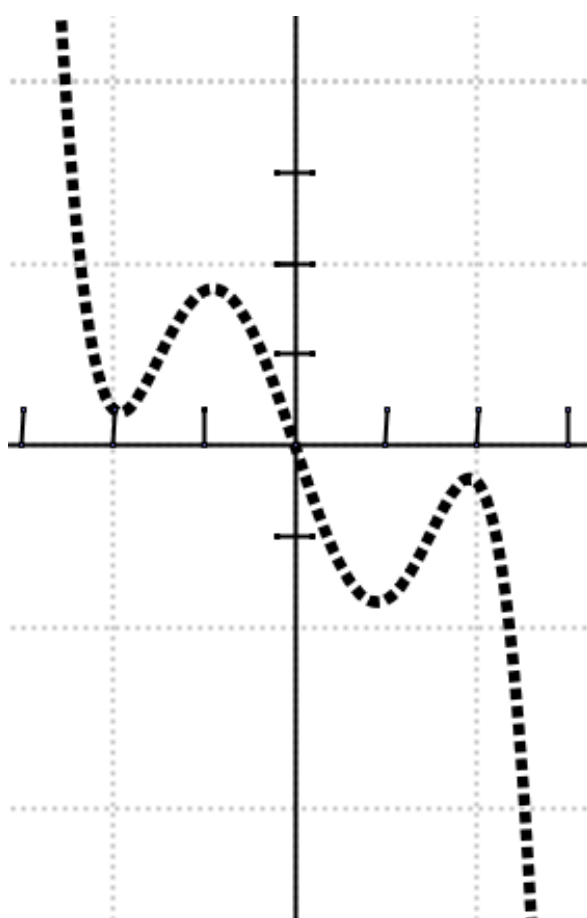
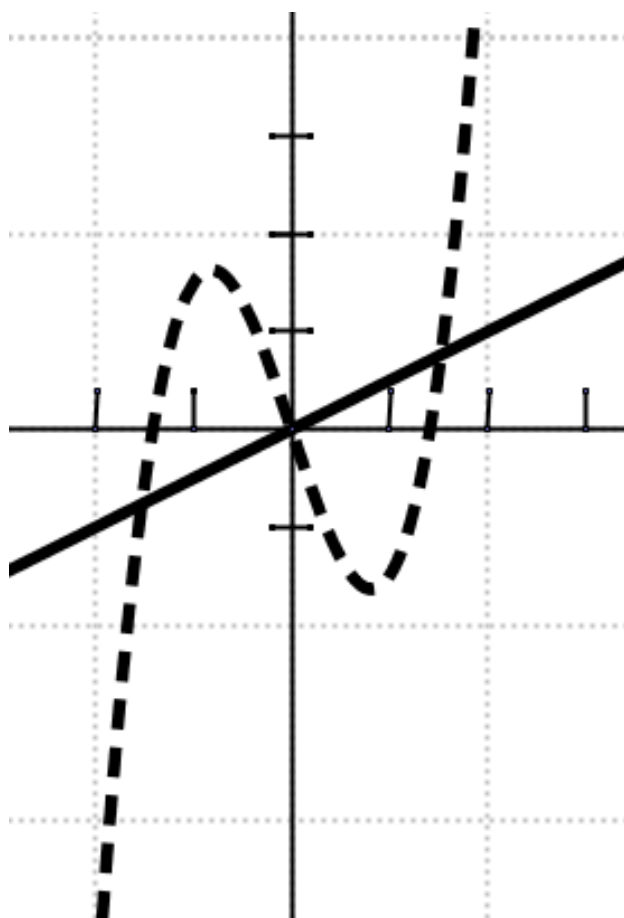
$\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 4} = \frac{3}{8}$

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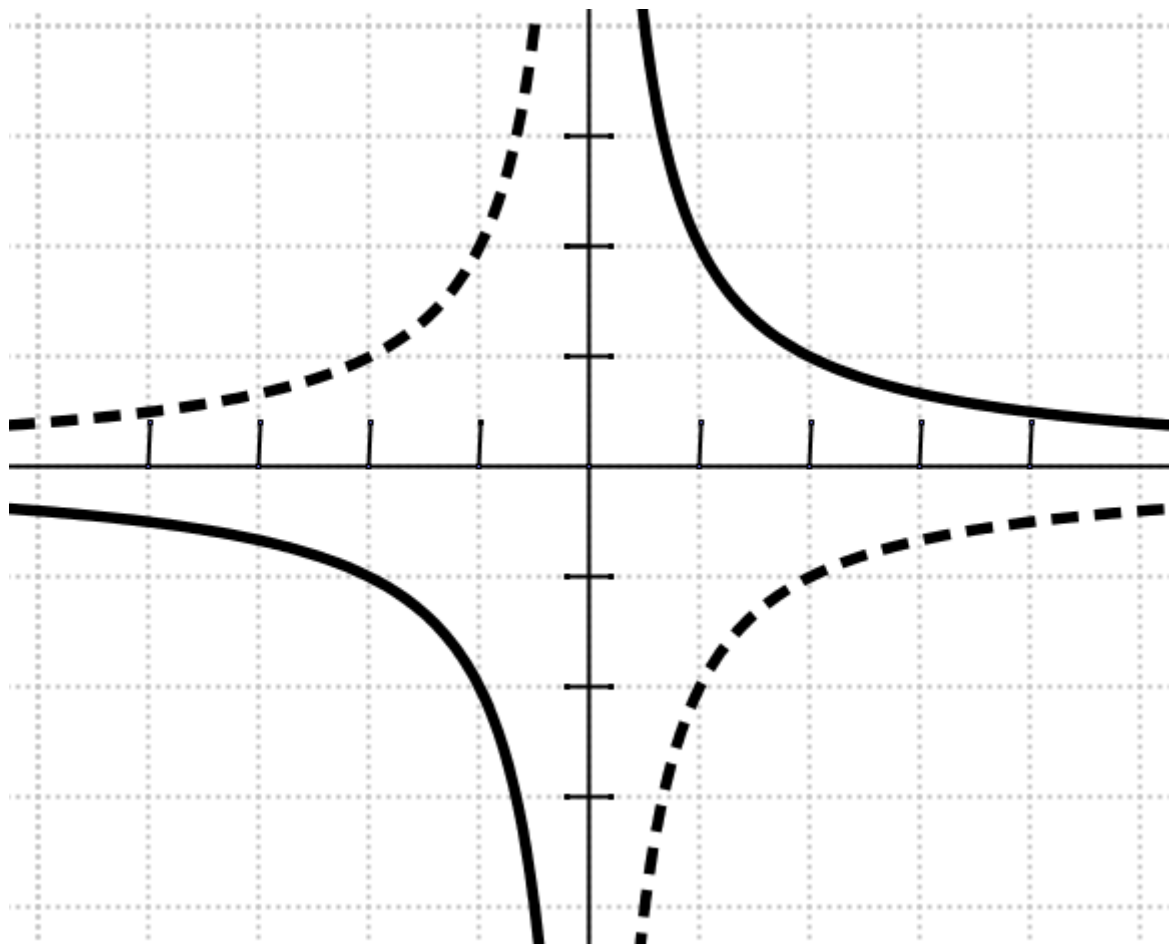
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$\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 4} = \frac{3}{8}$



The diagrams illustrate the construction of the number 10:

- 1 dot
- 2 dots (1x2 grid)
- 3 dots (1x3 grid)
- 4 dots (2x2 grid)
- 5 dots (2x3 grid)
- 6 dots (2x3 grid with 1 dot above)
- 7 dots (2x3 grid with 2 dots above)
- 8 dots (2x3 grid with 3 dots above)
- 9 dots (2x3 grid with 3 dots above and 1 dot to the right)
- 10 dots (2x3 grid with 3 dots above and 1 dot to the right, plus 1 dot further right)
- 10 dots in a 2x5 ten-frame
- 10 dots in a 2x5 ten-frame, with the top row shaded



$\frac{1}{x}$ 
 $\frac{1}{x^2}$ 
 $\frac{1}{x^3}$ 
 $\frac{1}{x^4}$ 
 $\frac{1}{x^5}$ 
 $\frac{1}{x^6}$ 
 $\frac{1}{x^7}$ 
 $\frac{1}{x^8}$ 
 $\frac{1}{x^9}$ 
 $\frac{1}{x^{10}}$

$\frac{1}{x^{11}}$ 
 $\frac{1}{x^{12}}$ 
 $\frac{1}{x^{13}}$ 
 $\frac{1}{x^{14}}$ 
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 $\frac{1}{x^{23}}$ 
 $\frac{1}{x^{24}}$ 
 $\frac{1}{x^{25}}$

$\frac{1}{x^{26}}$ 
 $\frac{1}{x^{27}}$ 
 $\frac{1}{x^{28}}$ 
 $\frac{1}{x^{29}}$ 
 $\frac{1}{x^{30}}$ 
 $\frac{1}{x^{31}}$ 
 $\frac{1}{x^{32}}$ 
 $\frac{1}{x^{33}}$ 
 $\frac{1}{x^{34}}$ 
 $\frac{1}{x^{35}}$

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