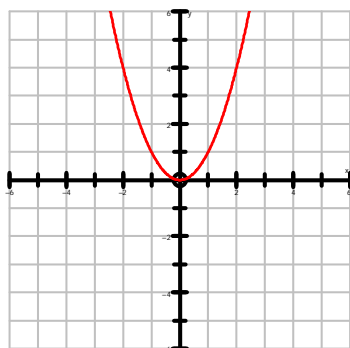


Graphing Relations: Transformations Intro (KEY)

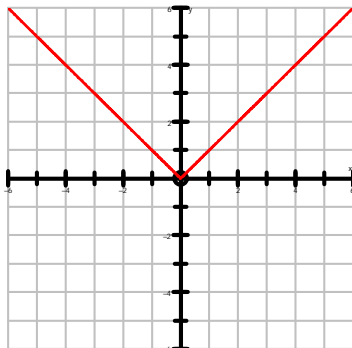
Graph the following equations with their parent graphs. Describe the transformation beneath each graph. Give the x and y intercepts.

1) $y = x^2$



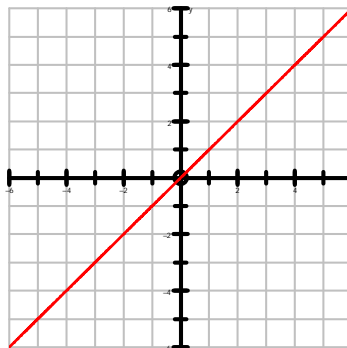
H: None
R: None
V: None

2) $y = |x|$



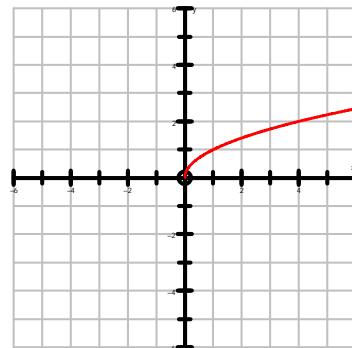
H: None
R: None
V: None

3) $y = x$



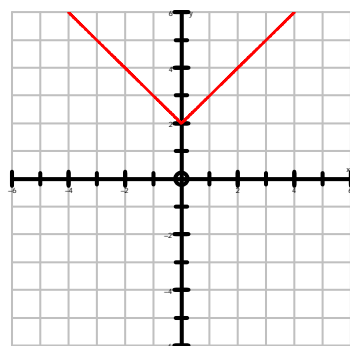
H: None
R: None
V: None

4) $y = \sqrt{x}$



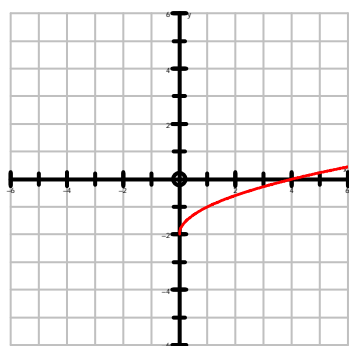
H: None
R: None
V: None

5) $y = |x| + 2$



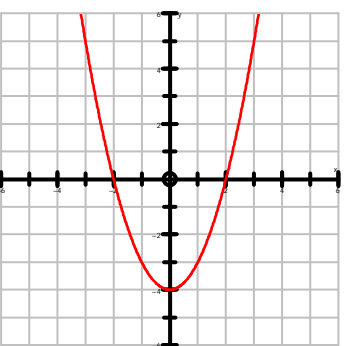
H: None
R: None
V: Up 2

6) $y = \sqrt{x} - 2$



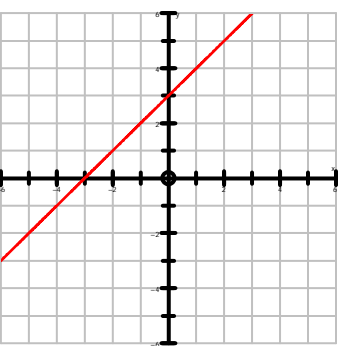
H: None
R: None
V: Down 2

7) $y = x^2 - 4$



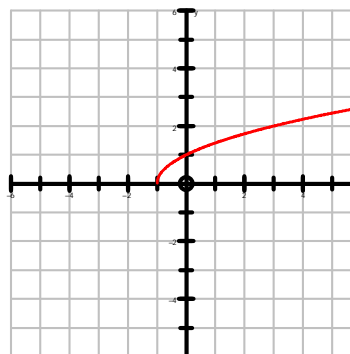
H: None
R: None
V: Down 4

8) $y = x + 3$



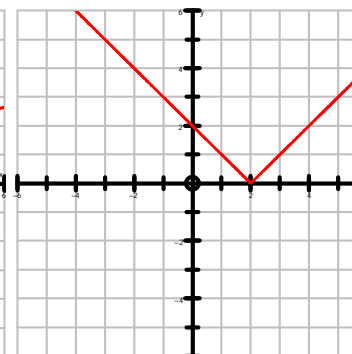
H: None
R: None
V: Up 3

9) $y = \sqrt{x+1}$



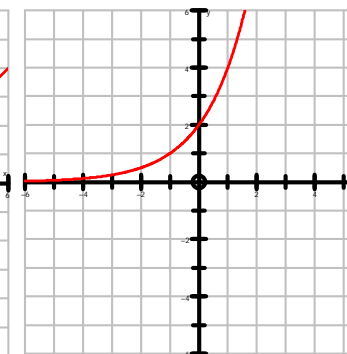
H: Left 1
R: None
V: None

10) $y = |x - 2|$



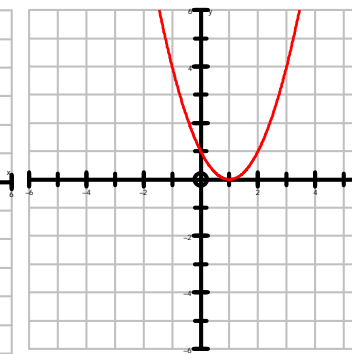
H: Rt 2
R: None
V: None

11) $y = 2^{x+1}$



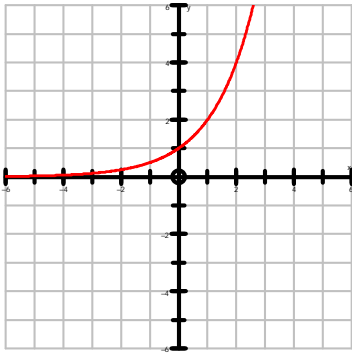
H: Left 1
R: None
V: None

12) $y = (x - 1)^2$



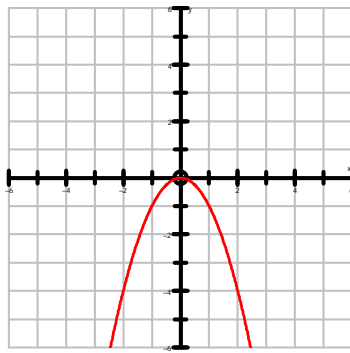
H: Rt 1
R: None
V: None

13) $y = 2^x$



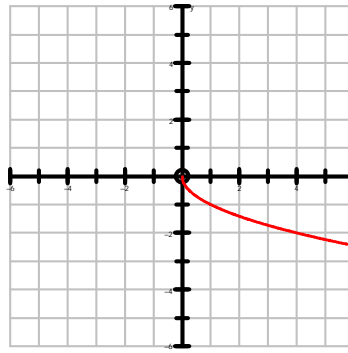
H: None
R: None
V: None

14) $y = -x^2$



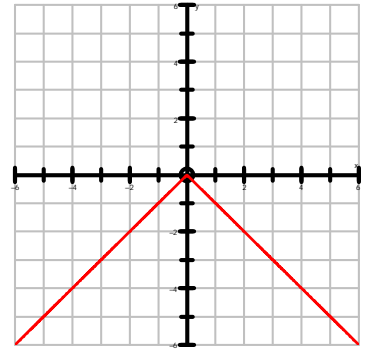
H: None
R: Vertical
V: None

15) $y = -\sqrt{x}$



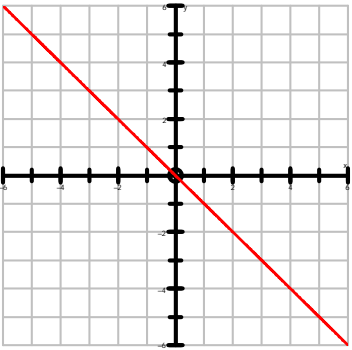
H: None
R: Vertical
V: None

16) $y = -|x|$



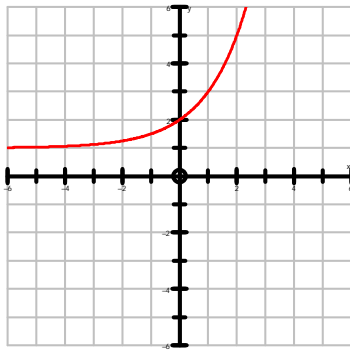
H: None
R: Vertical
V: None

17) $y = -x$



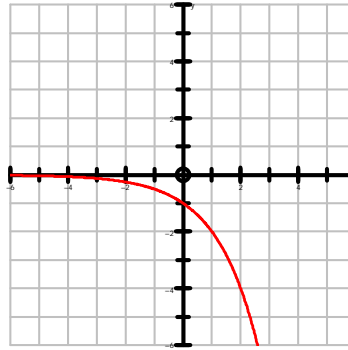
H: None
R: Vertical
V: None

18) $y = 2^x + 1$



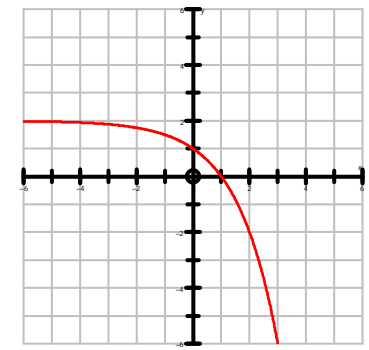
H: None
R: None
V: Up 1

19) $y = -2^x$



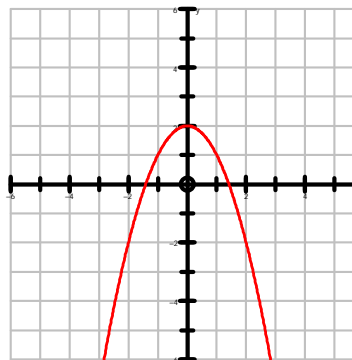
H: None
R: Vertical
V: None

20) $y = -2^x + 2$



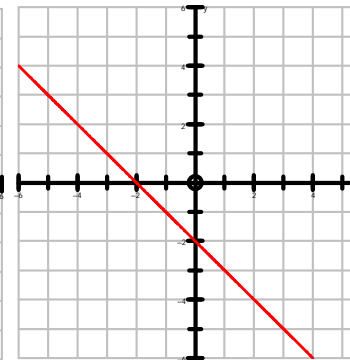
H: None
R: Vertical
V: Up 2

21) $y = -x^2 + 2$



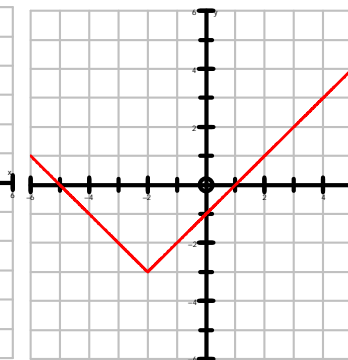
H: None
R: Vertical
V: Up 2

22) $y = -x - 2$



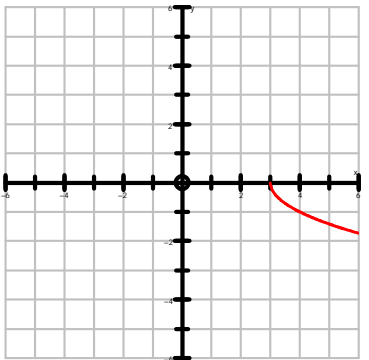
H: None
R: Vertical
V: Down 2

23) $y = |x + 2| - 3$



H: Left 2
R: None
V: Down 3

24) $y = -\sqrt{x-3}$



H: Right 3
R: Vertical
V: None

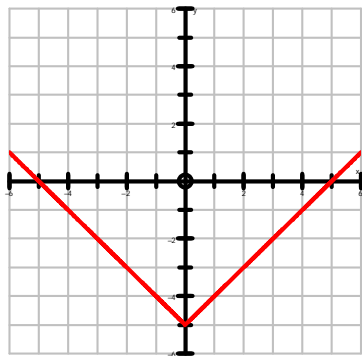
Given the graph of an equation, identify the parent equation, describe the transformations, and write the equation. Label the x and y intercepts.

25) $y = |x| - 5$

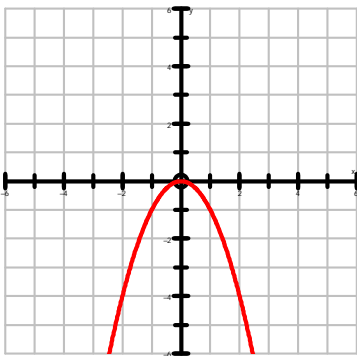
26) $y = -x^2$

27) $y = x + 1$

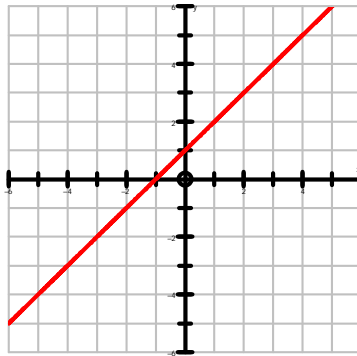
28) $y = \sqrt{x+4}$



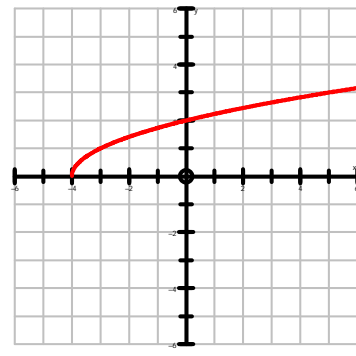
H:
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H:
R:
V:



H:
R:
V:



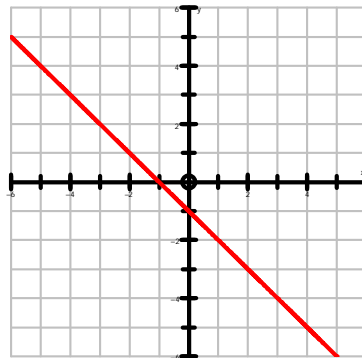
H:
R:
V:

29) $y = -x - 1$

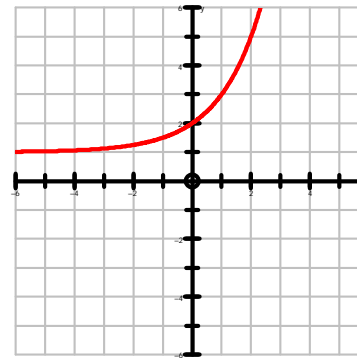
30) $y = 2^x + 1$

31) $y = (x - 2)^2 - 1$

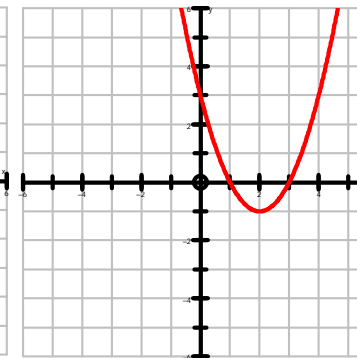
32) $y = -|x + 2|$



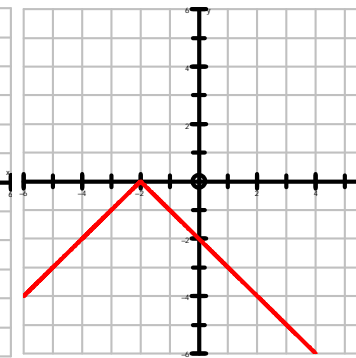
H:
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H:
R:
V:



H:
R:
V:



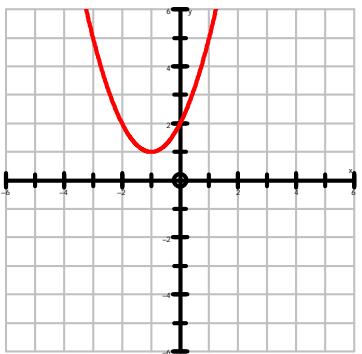
H:
R:
V:

33) $y = (x + 1)^2 + 1$

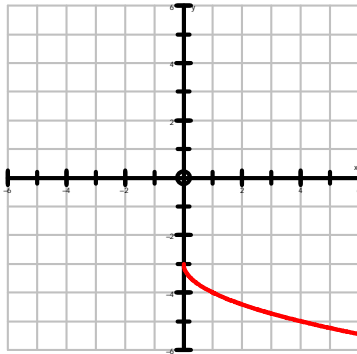
34) $y = -\sqrt{x} - 3$

35) $y = -2^x$

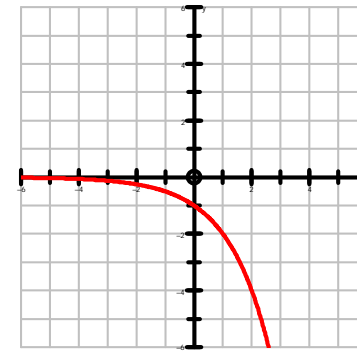
36) $y = -x^2 + 4$



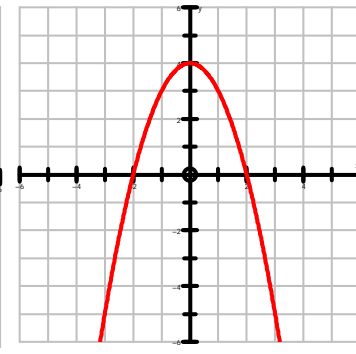
H:
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H:
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