



## Puzzle Time

### What Do You Get When You Cross Peanut Butter And A Quilt?

Write the letter of each answer in the box containing the exercise number.

**Write an equation of the parabola in vertex form.**

1. passes through  $(-5, 0)$  and has vertex  $(-2, 1)$
2. passes through  $(4, 10)$  and has vertex  $(0, 0)$
3. passes through  $(6, -1)$  and has vertex  $(14, -20)$
4. passes through  $(-5, -3)$  and has vertex  $(7, 12)$
5. passes through  $(9, 15)$  and has vertex  $(-6, 21)$
6. passes through  $(0, 0)$  and has vertex  $(-10, -4)$

**Write an equation of the parabola in intercept form.**

7.  $x$ -intercepts of 10 and  $-2$ ; passes through  $(1, 4)$
8.  $x$ -intercepts of 9 and  $-3$ ; passes through  $(3, 4)$
9.  $x$ -intercepts of  $-5$  and  $-1$ ; passes through  $(-10, 2)$
10.  $x$ -intercepts of 4 and 6; passes through  $(2, 3)$
11.  $x$ -intercepts of  $-10$  and 8; passes through  $(-6, -4)$
12.  $x$ -intercepts of 0 and 4; passes through  $(12, -8)$

#### Answers

- B.**  $y = \frac{5}{8}x^2$
- R.**  $y = \frac{2}{45}(x + 5)(x + 1)$
- D.**  $y = \frac{1}{25}(x + 10)^2 - 4$
- R.**  $y = \frac{19}{64}(x - 14)^2 - 20$
- P.**  $y = -\frac{1}{9}(x - 9)(x + 3)$
- A.**  $y = -\frac{2}{75}(x + 6)^2 + 21$
- S.**  $y = -\frac{4}{27}(x - 10)(x + 2)$
- E.**  $y = \frac{3}{8}(x - 4)(x - 6)$
- A.**  $y = \frac{1}{14}(x + 10)(x - 8)$
- E.**  $y = -\frac{5}{48}(x - 7)^2 + 12$
- D.**  $y = -\frac{1}{12}x(x - 4)$
- A.**  $y = -\frac{1}{9}(x + 2)^2 + 1$

1		2	3	4	5	6		7	8	9	10	11	12
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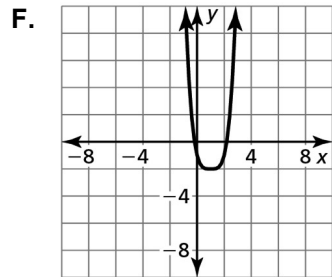
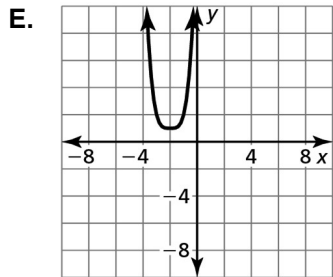
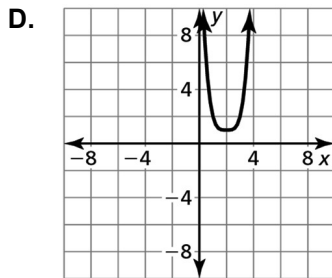
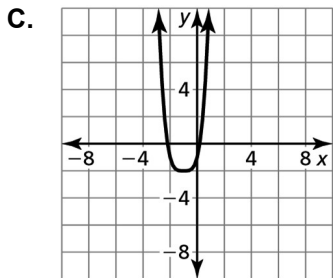
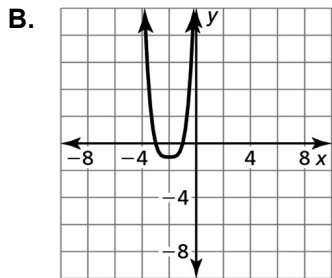
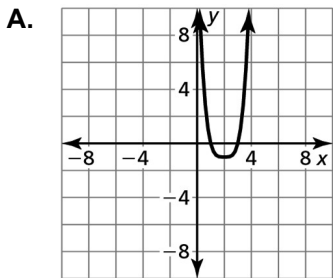
# Puzzle Time

## What Day Does A Fish Hate The Most?

Write the letter of each answer in the box containing the exercise number.

Match the function with the correct transformation of the graph of  $f(x) = x^4$ .

1.  $f(x) = (x - 2)^4 - 1$
2.  $f(x) = (x + 1)^4 - 2$
3.  $f(x) = (x - 1)^4 - 2$
4.  $f(x) = (x + 2)^4 - 1$
5.  $f(x) = (x - 2)^4 + 1$
6.  $f(x) = (x + 2)^4 + 1$



### Answers

- Y. E  
R. C  
Y. F  
D. B  
A. D  
F. A

1	2	3	4	5	6
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