



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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