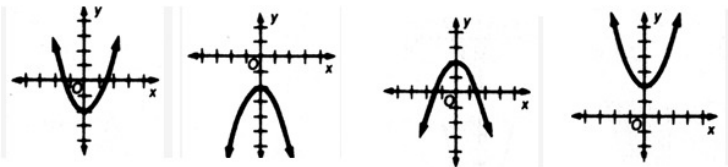


Name _____

- 1** Which set of ordered pairs is *not* a function?
 (1) $\{(1, 2), (2, 1), (4, 7), (8, 9)\}$ (3) $\{(-2, 8), (2, 0), (-6, 7), (6, 9)\}$
 (2) $\{(-2, 1), (-3, 1), (-4, 1), (-5, 1)\}$ (4) $\{(3, 8), (3, 0), (-4, 1), (2, 4)\}$

- 2** Which expression is equivalent to $x^6 - y^6$?
 (1) $(x^3 - y^3)(x^3 - y^3)$ (3) $(3x^3)^2 - (3y^3)^2$
 (2) $(x^3 + y^3)(x^3 - y^3)$ (4) $(x^3) - (y^3)$

- 3** Which graph represents the quadratic function $f(x) = x^2 + 2$?
 (1) (2) (3) (4)



- 4** If $4x^2 - 36 = 0$, the roots of the equation are:
 (1) 3 and -3 (3) 3, only
 (2) 6 and -6 (4) -6, only

- 5** Which point is not on the graph of $g(x) = x^2 - 2x + 8$?
 (1) $(-2, 16)$ (3) $(7, 1)$
 (2) $(3, 11)$ (4) $(2, 8)$

- 6** The value for the x-intercept for the graph of $2x - 3y = 12$ is:
 (1) 6 (3) -4
 (2) $\frac{2}{3}$ (4) $-\frac{2}{3}$

- 7** Let f be a function such that $f(x) = 4x - 8$ is defined on the domain $2 \leq x \leq 6$. The range of the function is:
 (1) $2 \leq y \leq 6$ (3) $0 \leq y \leq 16$
 (2) $4 \leq y \leq -8$ (4) $-\infty \leq y \leq \infty$

- 8** Which expression is equivalent to $x^4 - 10x + 25$?
 (1) $(x^2 + 5)(x^2 - 5)$ (3) $(x^2 + 5)(x^2 + 5)$
 (2) $(x^2 - 5)(x^2 - 5)$ (4) $(5 + x^2)(5 - x^2)$

- 9** The zeros of the function $f(x) = (x + 4)^2 - 36$ are
 (1) 2 and -6 (3) -10 and 2
 (2) -2 and 6 (4) 10 and -2

- 10** Which equation has the same solution as $3x^2 - 7x + 2$.
 (1) $(3x + 1)(x - 6)$ (3) $(3x + 1)(x - 2)$
 (2) $(3x - 1)(x - 6)$ (4) $(3x - 1)(x - 2)$

monday

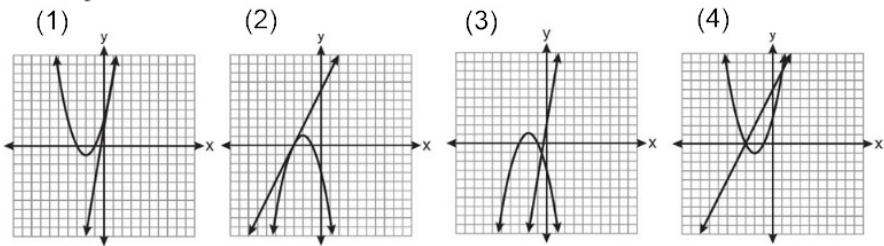
tuesday

Name _____

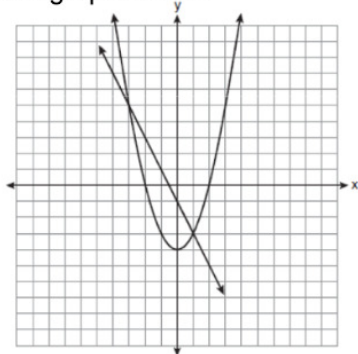
11 Cherice opened an account with \$4,000 on her 16th birthday. She invested it at a 3% interest rate compounded annually. No deposits or withdrawals were made. Which expression can be used to determine how much money Cherice will have in the bank on her 18th birthday?

- (1) $4000(1 + 0.03)^{18}$ (3) $4000(1 + 0.03)^2$
 (2) $4000(1 + 0.03)^{16}$ (4) $4000(1 - 0.03)^{18}$

12 Which graph could be used to find the solution of the system of equations $y = 2x + 6$ and $y = x^2 + 4x + 3$?



13 Which ordered pair is a solution of the system of equations shown in the graph below?



- 1) $(-3, 1)$
 2) $(-3, 5)$
 3) $(0, -1)$
 4) $(0, -4)$

14 The formula for the volume of a pyramid is $V = \frac{1}{3} Bh$. What is h expressed in terms of B and V ?

- 1) $h = \frac{1}{3} VB$
 2) $h = \frac{V}{3B}$
 3) $h = \frac{3V}{B}$
 4) $h = 3VB$

15 If $s = \frac{2x+t}{r}$, then x equals

- 1) $\frac{rs-t}{2}$
 2) $\frac{rs+1}{2}$
 3) $2rs-t$
 4) $rs-2t$

16 In a science fiction novel, the main character found a mysterious rock that decreased in size each day. The table below shows the part of the rock that remained at noon on successive days.

Day	Fractional Part of the Rock Remaining
1	1
2	$\frac{1}{2}$
3	$\frac{1}{4}$
4	$\frac{1}{8}$

Which fractional part of the rock will remain at noon on day 7?

- 1) $\frac{1}{128}$ 3) $\frac{1}{14}$
 2) $\frac{1}{64}$ 4) $\frac{1}{12}$

wednesday

thursday