

### Integrated Algebra - August '09

- 18 Which value of  $x$  makes the expression  $\frac{x^2 - 9}{x^2 + 7x + 10}$  undefined?
- (1) -5                                      (3) 3  
(2) 2                                        (4) -3

21 The solution to the equation  $x^2 - 6x = 0$  is

- (1) 0, only                                      (3) 0 and 6  
(2) 6, only                                      (4)  $\pm\sqrt{6}$

### Integrated Algebra - June '09

- 2 What are the roots of the equation  $x^2 - 7x + 6 = 0$ ?
- (1) 1 and 7                                      (3) -1 and -6  
(2) -1 and 7                                    (4) 1 and 6

- 18 What are the vertex and axis of symmetry of the parabola  $y = x^2 - 16x + 63$ ?
- (1) vertex: (8,-1); axis of symmetry:  $x = 8$   
(2) vertex: (8,1); axis of symmetry:  $x = 8$   
(3) vertex: (-8,-1); axis of symmetry:  $x = -8$   
(4) vertex: (-8,1); axis of symmetry:  $x = -8$

- 16 Which value of  $n$  makes the expression  $\frac{5n}{2n - 1}$  undefined?
- (1) 1    (3)  $-\frac{1}{2}$   
(2) 0    (4)  $\frac{1}{2}$

### Integrated Algebra - January '09

- 14 What are the roots of the equation  $x^2 - 10x + 21 = 0$ ?
- (1) 1 and 21                                      (3) 3 and 7  
(2) -5 and -5                                    (4) -3 and -7

- 25 The function  $y = \frac{x}{x^2 - 9}$  is undefined when the value of  $x$  is
- (1) 0 or 3                                        (3) 3, only  
(2) 3 or -3                                      (4) -3, only

### Integrated Algebra - June '08

- 17 Which value of  $x$  makes the expression  $\frac{x+4}{x-3}$  undefined?
- (1) -4    (3) 3  
(2) -3    (4) 0

### Integrated Algebra Sampler - Fall '07

- 28 For which value of  $x$  is  $\frac{x-3}{x^2-4}$  undefined?
- (1) -2    (3) 3  
(2) 0    (4) 4