

Answer Key

Practice A

1. B 2. A 3. C

4. $f(x) = (x + 1)(x - 1)(x - 3)$

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

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

7. $f(x) = (x + 3)(x + 1)(x - 6)$

8. $f(x) = (x + 2)(x - 3)(x - 5)$

9. $f(x) = (x - 3)(x - 4)(x - 5)$

10. $f(x) = (x + 2)(x + 1)(x - 6)$

11.

$f(1)$	$f(2)$	$f(3)$	$f(4)$	$f(5)$	$f(6)$	$f(7)$	
0	0	2	6	12	20	30	
∖		∖		∖		∖	
0	2	4	6	8	10		
∖		∖		∖		∖	
	2	2	2	2	2		

12.

$f(1)$	$f(2)$	$f(3)$	$f(4)$	$f(5)$	$f(6)$	$f(7)$	
2	11	34	77	146	247	386	
∖		∖		∖		∖	
9	23	43	69	101	139		
∖		∖		∖		∖	
	14	20	26	32	38		
∖		∖		∖		∖	
	6	6	6	6			

13.

$f(1)$	$f(2)$	$f(3)$	$f(4)$	$f(5)$	$f(6)$	$f(7)$	
8	28	74	158	292	488	758	
∖		∖		∖		∖	
20	46	84	134	196	270		
∖		∖		∖		∖	
	26	38	50	62	74		
∖		∖		∖		∖	
	12	12	12	12			

14. $y = 0.33x^3 - 3.25x^2 + 8.77x + 10.64$

15. $y = -0.22x^3 + 2.51x^2 - 8.98x + 20.43$

16. $y = -0.58x^3 + 5.07x^2 - 19.20x + 53.43$

17. $y = 0.28x^3 - 2.10x^2 + 5.56x + 1.79$