

**SM3 unit 2 test review answers**

1.  $f(x) = (x + 9)(x - 9)$

2.  $f(x) = (x + 5)(x^2 - 5x + 25)$

3.  $f(x) = (x + 6)(x + 10)$

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

5.  $f(x) = (x - 7)^2$

6.  $f(x) = (4x - 3y)(16x^2 + 12xy + 9y^2)$

7.  $f(x) = 5x(5x - 3)$

8.  $f(x) = 4(3y - 2)(9y^2 + 6y + 4)$

9.  $f(x) = (8x + 5y)(8x - 5y)$

10.  $f(x) = (5x - 2)(x - 10)$

11.  $f(x) = 9(y - 2)$

12.  $f(x) = 2(5x + 2)(2x + 3)$

13.  $(x - 1)(x + 2)$

14.  $2(x + 3)$

15.  $4x(x + 3)(x - 2)$

16.  $x + 5$

17. 8

18.  $\frac{x+3}{x-7}$

19.  $\frac{x-7}{(x-2)(x-3)}$

20.  $\frac{4}{x}$

21.  $\frac{1}{x+4}$

22.  $\frac{x-2}{x(x-4)}$

23. 3

24.  $\frac{(x+3)(x-3)}{2}$

25.  $\frac{9}{2(x-3)}$

26.  $\frac{x-2}{(x+4)(x-4)}$

27.  $\frac{6}{(x+3)}$

28.  $\frac{x^2+4x+16}{(x+4)^2}$