

**SM2 unit 4 test review answers**

1.  $26x^2 + 12x - 24$

2.  $41u^3 - 32u^2 - 3u$

3.  $28x^3 - 5x^2 - 21$

4.  $26x^6 + 22x^5 - 30x^4$

5.  $-28y^4 + 63y^3 - 56y^2$

6.  $x^2 + 5x - 84$

7.  $144r^2 - 216r + 81$

8.  $18z^2 - 53z - 35$

9.  $x - 12$  domain =  $\left(-\infty, -\frac{4}{5}\right) \cup \left(-\frac{4}{5}, \infty\right)$

10.  $\frac{1}{x-6}$  domain =  $\left(-\infty, -\frac{1}{4}\right) \cup \left(-\frac{1}{4}, 6\right) \cup (6, \infty)$

11.  $h(x) = -x^2 - 17x + 69$

12.  $h(x) = 36x^2 - 108x + 81$

13.  $h(x) = -6x^3 + 15x^2 + 243x - 378$

14.  $h(x) = \frac{-6x+9}{(x-7)(x+6)}$  domain =  $(-\infty, -6) \cup (-6, 7) \cup (7, \infty)$

15. 322

16. -10

17.  $9i$

18.  $-2i\sqrt{15}$

19.  $-9i\sqrt{5}$

20.  $2i\sqrt{30}$

21. 132

22.  $8 + 9i$

23.  $10 - 5i$

24.  $24 + 36i$

25.  $51 + 57i$

26.  $45 + 28i$