

### 6.1 WS B

1.  $\frac{1}{625}$

2.  $\frac{1}{625}$

3.  $-\frac{1}{7}$

4.  $\frac{1}{8}$

5.  $-\frac{27}{16}$

6.  $\frac{1}{36}$

7.  $\frac{n^4}{49}$

8.  $\frac{1}{jk^4}$

9.  $\frac{y^{10}}{25}$

10.  $\frac{64s^3}{t^5}$

11.  $\frac{b^2}{a}$

12.  $\frac{272z^6}{y^8}$

13.  $p^{18}$

14.  $\frac{1}{q^{20}}$

15.  $\frac{1}{625}$

16.  $-\frac{1}{4}$

17.  $x^5$

18.  $v^6$

19.  $-512t^6$

20.  $-\frac{125}{q^{12}}$

21.  $81h^{20}$

22.  $\frac{100y^2}{x^{10}}$

23.  $\frac{16a^{21}}{27b^{46}}$

24.  $2.58 \times 10^4$ ; 25,800

25.  $2.5 \times 10^6$ ; 2,500,000

26.  $x = 3$  and  $y = 5$

### 6.2 WS B

1.  $\pm 2$

2. 3

3. 9 cm

4. 10 yd

5. 8

6. 3

7. not a real number

8.  $(-53)^{4/5}$

9.  $110^{7/4}$

10.  $(\sqrt[9]{-34})^4$  or  $\sqrt[9]{(-34)^4}$

11.  $(\sqrt[4]{41})^7$  or  $\sqrt[4]{(41)^7}$

12. -8

13. not a real number

14. 10,000

15.  $\frac{1}{25}$

16.  $\frac{1}{7}$

17.  $\frac{1}{512}$

18. 4 cm

19. 6.2%