Solving Exponential Equations – Part 2:

Solve:

$$4^x = 16^{x-3}$$

Solve:

$$4^{x} = 9$$

Solve:

$$7^x = 3$$

$$6^{2x+1} = 20$$

PRACTICE

Solve each equation, giving your answer to the degree of accuracy stated.

1
$$2^x = 5 (2 \text{ d.p.})$$

1
$$2^x = 5$$
 (2 d.p.) 2 $2^{2x+1} = 5$ (3 d.p.)

3
$$5^{x-1} = 3$$
 (2 s.f.) **4** $3^{2x+1} = 5$ (3 s.f.)

4
$$3^{2x+1} = 5$$
 (3 s.f.)

5
$$4 \times 2^x = 6 (2 \text{ d.p.})$$

5
$$4 \times 2^x = 6$$
 (2 d.p.) **6** $2 \times 2^{x-1} = 6$ (2 d.p.)

$$7 \frac{2^x}{3} = 6 (2 \text{ s.f.})$$

7
$$\frac{2^x}{3}$$
 = 6 (2 s.f.) 8 $\frac{2^{2x-3}}{3}$ = 16 (2 s.f.)