

Answers

Essential Skills 29	
1	45°
2	63.4°
3	26.6°
4	135°
5	158.2°
6	1.19
7	0.77
8	0.23
9	-1.53
10	-2
AQ	63.4°

Essential Skills 30	
1	30°
2	104.96°
3	125.2°
4	78.9°
5	63.7°
6	92.4°
7	63.3°
8	127.8°
9	68.0°
10	154.2°
AQ	(a) C (6, 3, 5) (b) E (5, 5, 3) (c) 122°

Essential Skills 31	
1	$x = 2.63$
2	$x = 2.80$
3	$x = 3.22$
4	$x = 1.28$
5	$x = 1.49$
6	$x = 0.30$
7	$x = 0.39$
8	$x = 2.75$
9	$x = 6.11$
10	$x = 0.15$
AQ	1. $x = 1.39$ 2. (a) 60.2kg (b) 23 years 3. (a) 420 (b) 2416 ants (c) 9.2 years

Essential Skills 32	
1	$y = 2x^3$
2	$y = 0.5x^2$
3	$y = \frac{7}{x}$
4	$y = \frac{13}{\sqrt{x}}$
5	$y = 3x^{0.2}$
6	$y = 8 \times 3^x$
7	$y = \frac{0.8^x}{0.2}$
8	$y = 8x^4$
9	$y = 27x^2$
10	$y = 6 \times \frac{1^x}{6}$
AQ	(a) $y = 9x^4$ (b) $y = 1.49 \times 0.51^x$