

Algebra II

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2)	a) $7^{\sqrt{3}+\sqrt{2}}$ b) $49^{\sqrt{3}}$	16)	$3-2\sqrt{2}$	26)	$\left\{-\frac{5}{9}\right\}$
6)	c) $7\sqrt{6}$ d) $7\sqrt{3}$	18)	$2^{\sqrt{3}/2}$	27)	$\{2\}$
4)	5π	20)	$\left\{\frac{3}{2}\right\}$	28)	$\{3\}$
6)	16π	21)	$\left\{-\frac{5}{3}\right\}$	29)	$\{3\}$
8)	1	22)	$\left\{-\frac{1}{2}\right\}$	30)	$\{1\}$
10)	1	23)	$\left\{\frac{2}{3}\right\}$	31)	$\{3\}$
12)	2	24)	$\left\{\frac{11}{4}\right\}$	32)	$\{0,2\}$
14)	$\frac{1}{5}$	25)	\emptyset		

$$8) \frac{6^{\sqrt{2}} 6^{\sqrt{2} \cdot 4.2}}{6^{3\sqrt{2}}} = \frac{6^{\sqrt{2}} \cdot 6^{2\sqrt{2}}}{6^{3\sqrt{2}}}$$

$$\frac{6^{3\sqrt{2}}}{6^{3\sqrt{2}}} = 1$$

$$16) \frac{(\sqrt{2}-1)^{2+\pi}}{(\sqrt{2}-1)^\pi}$$

$$(\sqrt{2}-1)^{2+\pi-\pi}$$

$$(\sqrt{2}-1)^2 = (\sqrt{2}-1)(\sqrt{2}-1)$$

$$\underline{2} - \underline{\sqrt{2}} - \underline{\sqrt{2}} + \underline{1} = 3 - 2\sqrt{2}$$

$$24) 49^{x-2} = 7\sqrt{7}$$

$$(7^2)^{x-2} = 7^1 \cdot 7^{\frac{1}{2}}$$

$$7^{2x-4} = 7^{\frac{3}{2}}$$

$$(2x-4 = \frac{3}{2}) \cdot 2$$

$$4x-8=3$$

$$4x=11$$

$$x = \frac{11}{4}$$

$$\left\{ \frac{11}{4} \right\}$$

$$26) 3^{-(x+5)} = 9^{4x}$$

$$28) 6^{x+1} = 36^{x-1}$$

$$6^{x+1} = (6^2)^{x-1}$$

$$x+1 = 2x-2$$

$$3 = x$$

$$\{3\}$$

$$30) \underbrace{3^{2x}} - 6 \cdot \underbrace{3^x} + \underbrace{9} = 0$$

$$(3^x - 3)(3^x - 3) = 0$$

$$3^x - 3 = 0$$

$$3^x = 3$$

$$x = 1$$

$$3^x = 3$$

$$x = 1$$

$$\{1\}$$