More problems for section 2.2 of *Essentials of Precalculus with Calculus Previews* by Zill and Dewar, 6e.

1. Graph the function by hand. Find all intercepts and asymptotes. Use a graphing calculator to check your answers.

a. $y = (x+1)^{1/4}$	b. $y = (x-2)^{-1/2} + 1$	c. $y = (x+3)^{-1/4} - 2$
d. $y = (3-x)^{-1/4}$	e. $y = (5+x)^{-1/6} - 2$	f. $y = (x+2)^{-2/7} + 1$
g. $y = (x-5)^{-4/5}$	h. $y = (5-x)^{-8/3} - 2$	i. $y = (4+x)^{-10/7} - 6$
j. $y = (x-2)^{-4} + 3$	k. $y = (1+x)^{-2} - 1$	l. $y = (x-3)^{-1}$
m. $y = x^{-3} + 1$	n. $y = \sqrt{2} - (x-2)^{-9/5}$	o. $y = -(x+4)^{-7/5} + 8$
p. $y = (-x)^{-3/5}$	q. $y = (2-x)^{-1/3}$	r. $y = (8-x)^{1/2} - 4$
s. $y = (81-x)^{3/4}$	t. $y = (x-3)^{4/7}$	u. $y = (-x)^{2/5} - 9$
v. $y = 8 + (-x)^{3/5}$	w. $y = (x-2)^{5/7} + 2$	x. $y = -(x-1)^{5/9} - 3$
y. $y = -(x-7)^{4/5} + 2$	z. $y = (-2-x)^{4/5} - 2$	27. $y = -x^{4/3} - 2$
28. $y = -x^{5/2} + 2$	29. $y = (3+x)^{7/5}$	30. $y = 2 - (x-1)^{9/7}$

<div align="center">Answers</div>

1a. $(-1,0),(0,1)$ 1b. No intercepts. VA $x = 2$. HA $y = 1$.   1c. $(0, 3^{-1/4} - 2), (-47/16, 0)$ VA $x = -3$. HA $y = -2$.
1d. $(0, 3^{-1/4})$VA $x = 3$. HA $y = 0$.   1e. $(-319/64, 0), (0, 5^{-1/6} - 2)$ VA $x = -5$. HA $y = -2$.   1f. $(0, 2^{-2/7} + 1)$ VA $x = -2$. HA $y = 1$.   1g. $(0, 5^{-4/5})$ VA $x = 5$. HA $y = 0$.   1h. $(5 \pm 2^{-3/8}, 0), (0, 5^{-8/3} - 2)$ VA $x = 5$. HA $y = -2$.   1i. $(-4 \pm 6^{-7/10}, 0)$, $(0, 4^{-10/7} - 6)$ VA $x = -4$. HA $y = -6$.   1j. $(0, 49/16)$ VA $x = 2$. HA $y = 3$.   1k. $(-2,0),(0,0)$ VA $x = -1$. HA $y = -1$.   1l. $(0, -1/3)$ VA $x = 3$. HA $y = 0$.   1m. $(-1, 0)$ VA $x = 0$. HA $y = 1$.   1n. $(2^{-5/18} + 2, 0), (0, \sqrt{2} + 2^{-9/5})$ VA $x = 2$. HA $y = \sqrt{2}$.   1o. $(8^{-5/7} - 4, 0), (0, -4^{-7/5} + 8)$ VA $x = -4$. HA $y = 8$.   1p. none VA $x = 0$. HA $y = 0$.   1q. $(0, 2^{-1/3})$ VA $x = 2$. HA $y = 0$.
1r. $(-8,0), (0, 2\sqrt{2} - 4)$ No asymptotes.   1s. $(0, 27), (81, 0)$ No asymptotes.   1t. $(3, 0), (0, 3^{4/7})$ No asymptotes.   1u. $(0, -9)$, $(243, 0), (-243, 0)$ No asymptotes.   1v. $(32, 0), (0, 8)$ No asymptotes.   1w. $(2 - 2^{7/5}, 0), (0, -2^{5/7} + 2)$ No asymptotes.
1x. $(1 - 3^{9/5}, 0), (0, -2)$ No asymptotes.   1y. $(7 \pm 2^{5/4}, 0), (0, 2 - 7^{4/5})$ No asymptotes.   1z. $(-2 \pm 2^{5/4}, 0), (0, 2^{4/5} - 2)$ No asymptotes.   127. $(0, -2)$ No asymptotes.   128. $(2^{2/5}, 0), (0, 2)$ No asymptotes.   129. $(-3, 0), (0, 3^{7/5})$ No asymptotes.
130. $(2^{7/9} + 1, 0), (0, 3)$ No asymptotes.