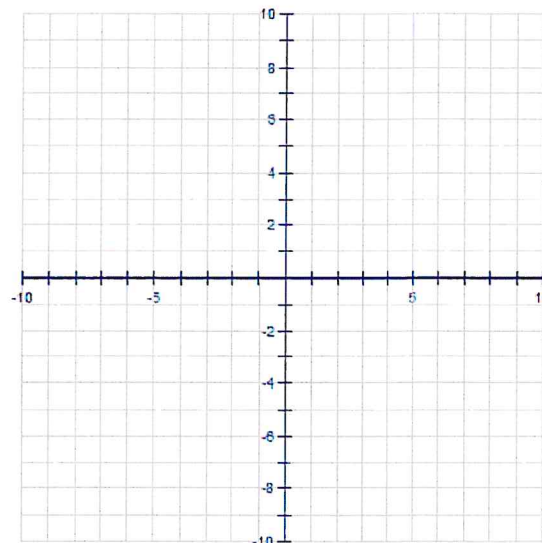


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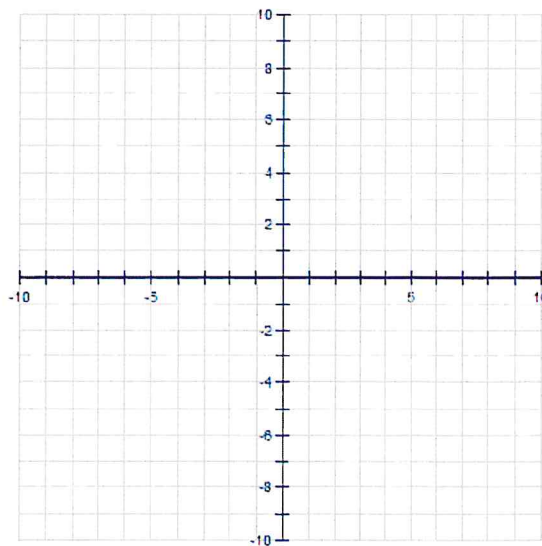
Algebra 2 CP Worksheet 8.1-8.2 Part 1

Make a table of values to graph each function. Then identify the domain, range, and asymptote.

1. $y = 5^x$



2. $y = 2\left(\frac{1}{4}\right)^x$



Algebra 2 CP Worksheet 8.1-8.2 Part 1

$$x-3 = -2$$

$$x = 1 + 3$$

$$x = 4$$

$$x-3 = -1$$

$$x = 2$$

$$x-3 = 0$$

$$x = 3$$

$$x-3 = 1$$

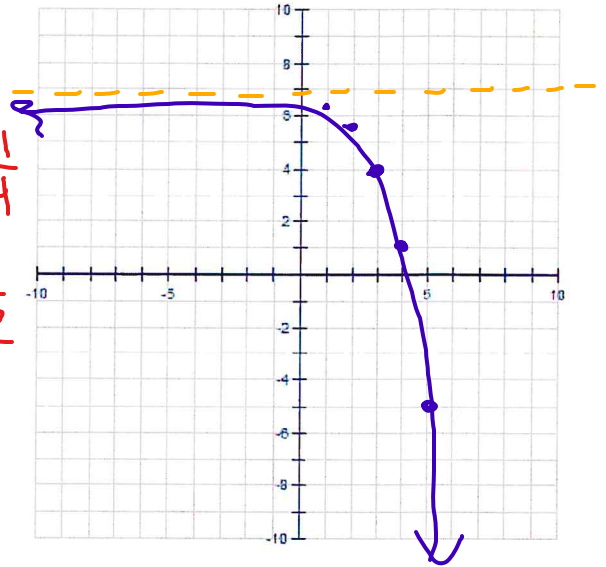
$$x = 4$$

$$x-3 = 2$$

$$x = 5$$

3. $y = -3 \cdot 2^{x-3} + 7$

| X | Y |
|---|---|
| 1 | $-3 \cdot 2^{-2} + 7 = \frac{-3}{4} + \frac{28}{4} = \frac{25}{4} = 6\frac{1}{4}$ |
| 2 | $-3 \cdot 2^{-1} + 7 = \frac{-3}{2} + \frac{14}{2} = \frac{11}{2} = 5\frac{1}{2}$ |
| 3 | $-3 \cdot 2^0 + 7 = -3 \cdot 1 + 7 = -3 + 7 = 4$ |
| 4 | $-3 \cdot 2^1 + 7 = -3 \cdot 2 + 7 = -6 + 7 = 1$ |
| 5 | $-3 \cdot 2^2 + 7 = -3 \cdot 4 + 7 = -12 + 7 = -5$ |



4. $y = \left(\frac{2}{3}\right)^{x+6} + 1$

$$x+6 = -2$$

$$x = -8$$

$$x+6 = -1$$

$$x = -7$$

$$x+6 = 0$$

$$x = -6$$

$$x+6 = 1$$

$$x = -5$$

$$x+6 = 2$$

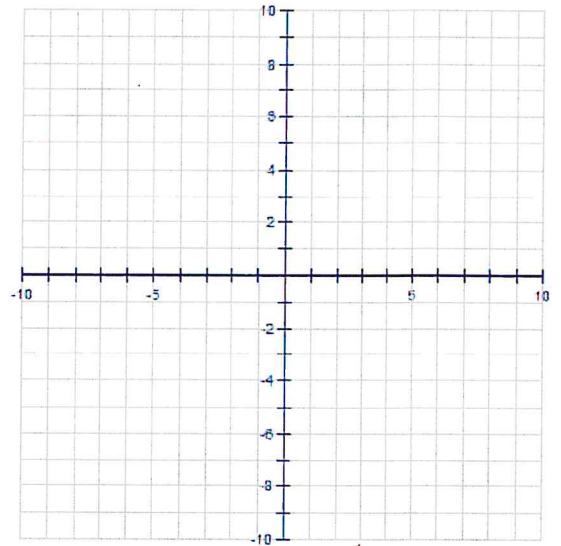
$$x = -4$$

| X | Y |
|----|--|
| -8 | $\left(\frac{2}{3}\right)^{-2} + 1 = \left(\frac{3}{2}\right)^2 + 1 = \frac{9}{4} + \frac{4}{4} = \frac{13}{4} = 3\frac{1}{4}$ |
| -7 | $\left(\frac{2}{3}\right)^{-1} + 1 = \left(\frac{3}{2}\right)^1 + 1 = \frac{3}{2} + \frac{2}{2} = \frac{5}{2} = 2\frac{1}{2}$ |
| -6 | $\left(\frac{2}{3}\right)^0 + 1 = 1 + 1 = 2$ |
| -5 | $\left(\frac{2}{3}\right)^1 + 1 = \frac{2}{3} + \frac{3}{3} = \frac{5}{3} = 1\frac{2}{3}$ |
| -4 | $\left(\frac{2}{3}\right)^2 + 1 = \frac{4}{9} + \frac{9}{9} = \frac{13}{9} = 1\frac{4}{9}$ |



Algebra 2 CP Worksheet 8.1-8.2 Part 1

5. $y = 2 \cdot 3^{x+1}$



6. $y = -\left(\frac{1}{2}\right)^x + 3$

