

p. 20() 1-37 odd, 59, 61-64

- ① no \rightarrow 8 is a constant
- ③ $a=1, b=5$
- ⑤ no \rightarrow b is a variable
- ⑦ 3
- ⑨ $-2 \cdot \sqrt[3]{3}$
- ⑪ $f(x) = \frac{3}{2} \left(\frac{1}{2}\right)^x$
- ⑬ $f(x) = 3(\sqrt{2})^x$
- ⑮ $\rightarrow 3$
- ⑰ flip over y-axis
- ⑲ vert. stretch baf 3
- ⑳ flip over y-axis horiz. shrink baf $\frac{1}{2}$
- ㉓ vert. stretch baf 3
 $\leftarrow 3$
flip over y-axis
horiz. shrink baf $\frac{1}{3}$
- ㉕ a
- ㉗ c
- ㉙ b $\uparrow 4$

- ③ decay
 $\lim_{x \rightarrow \infty} f(x) = 0$
 $\lim_{x \rightarrow -\infty} f(x) = \infty$
- ③③ decay
 $\lim_{x \rightarrow \infty} f(x) = 0$
 $\lim_{x \rightarrow -\infty} f(x) = \infty$
- ③⑤ $x < 0$
- ③⑦ $x < 0$

- ⑤⑨ False. Decay decreases until it reaches the asymptote @ $y=0$
- ⑥① e
- ⑥② c
- ⑥③ a
- ⑥④ b