1. Graph $y = x^2$ and $y = x^4$ over the interval $[-3/2, 3/2]$ on the same graph. Label the points $x = 1$ and $x = -1$ on the x-axis.

2. Graph $y = x^3$ and $y = x^{\frac{1}{3}}$ on adjacent graphs (i.e on two different graphs, one next to the other).

3. Graph $y = x^3$, $y = 2x^3$ on the same graph. Label which function is which, both for $x > 0$ and for $x < 0$.

4. Graph $y = -x^2$, $y = (x-1)^2$ and $y = (x-1)^2 - 1$ on adjacent graphs.

5. Graph $y = \sqrt{x}$, $y = \sqrt{x-1}$, and $y = \sqrt{-x}$ on adjacent graphs.

6. Graph $y = \sin(x)$ and $y = \cos(x)$ on the same graph over the interval $[0, 4\pi]$. Label the points 0, $\pi/2$, π, $3\pi/2$ and 2π on the x-axis.

7. Graph $y = \sin(2x)$ and $y = 2\sin(x)$ over the interval $[0, 2\pi]$ on the same graph. Label the points 0, $\pi/2$, π, $3\pi/2$ and 2π on the x-axis.

8. Graph $-2\cos(x)$ and $3 - 2\cos(x)$ on adjacent graphs. Label the points 0, $\pi/2$, π, $3\pi/2$ and 2π on the x-axis.

9. Graph $y = \tan(x)$ and $y = \tan\left(x - \dfrac{\pi}{2}\right)$ over the interval $[0, 2\pi]$ on adjacent graphs.

10. Graph $y = \cos(x)$ and $y = |\cos(x)|$ over the interval $[0, 2\pi]$ on the same graph. Label the points 0, $\pi/2$, π, $3\pi/2$ and 2π on the x-axis.

11. Challenge! Graph $y = 3 - 2|\cos(x)|$.

12. Challenge! Graph $y = \sin(x^2)$ and $y = \sin(1/x)$ on adjacent graphs.