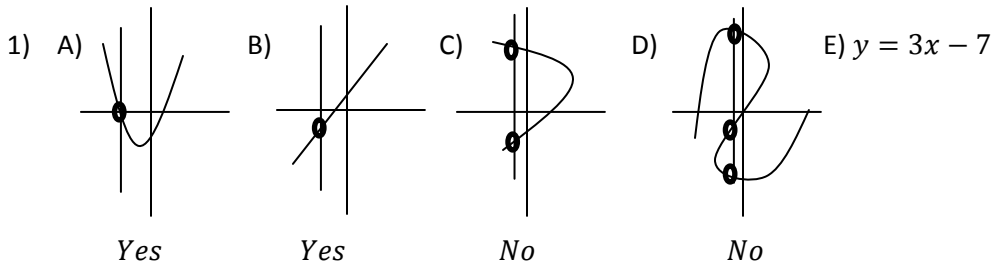


10.1



F) $y^2 - x^2 = 1$
 $\frac{+x^2 + x^2}{\sqrt{y^2} = \sqrt{(x^2 + 1)}}$
 $y = \pm\sqrt{x^2 + 1}$
 No

G) $\sqrt{y} + x = 2$
 $\frac{-x - x}{(\sqrt{y})^2 = (2 - x)^2}$
 $y = (2 - x)^2$
 Yes

H) $x^2 + y^2 = 1$
 $\frac{-x^2 - x^2}{\sqrt{y^2} = \sqrt{(1 - x^2)}}$
 $y = \pm\sqrt{1 - x^2}$
 No

3) $f(x) = \sqrt{5 - 4x}$
 $5 - 4x \geq 0$
 $\frac{-5 \quad -5}{-\frac{4x}{-4} \geq \frac{-5}{-4}}$
 $x \leq \frac{5}{4}$

5) $f(x) = x^2 - 3x - 4$
 All Real Numbers \mathbb{R}

7) $f(x) = \sqrt{x - 16}$
 $x - 16 \geq 0$
 $\frac{+16 \quad +16}{x \geq 16}$

9) $h(x) = \frac{\sqrt{3x-12}}{x^2-25}$
 $x^2 - 25 \neq 0$
 $(x - 5)(x + 5) \neq 0$
 $x - 5 = 0 \quad x + 5 = 0$
 $\frac{+5 \quad +5}{x = 5} \quad \frac{-5 \quad -5}{x = -5}$
 $x \geq 4, x \neq 5$

$3x - 12 \geq 0$
 $+12 \quad +12$
 $\frac{3x}{3} \geq \frac{12}{3}$
 $x \geq 4$

11) $g(x) = 4x - 4 \quad g(0)$
 $g(0) = 4(0) - 4$
 $g(0) = 0 - 4$
 $g(0) = -4$

13) $f(x) = |3x + 1| + 1 \quad f(0)$
 $f(0) = |3(0) + 1| + 1$
 $f(0) = |0 + 1| + 1$
 $f(0) = |1| + 1$
 $f(0) = 1 + 1$
 $f(0) = 2$

15) $f(n) = -2|-n - 2| + 1 \quad f(-6)$
 $f(-6) = -2|-(-6) - 2| + 1$
 $f(-6) = -2|6 - 2| + 1$
 $f(-6) = -2|4| + 1$
 $f(-6) = -2(4) + 1$
 $f(-6) = -8 + 1$
 $f(-6) = -7$

17) $f(t) = 3^t - 2 \quad f(-2)$
 $f(-2) = 3^{-2} - 2$
 $f(-2) = \frac{1}{3^2} - 2$
 $f(-2) = \frac{1}{9} - 2$
 $f(-2) = \frac{1}{9} - \frac{18}{9}$
 $f(-2) = -\frac{17}{9}$

$$\begin{aligned} 19) f(t) &= |t + 3| & f(10) \\ f(10) &= |10 + 3| \\ f(10) &= |13| \\ f(10) &= 13 \end{aligned}$$

$$\begin{aligned} 21) w(n) &= 4n + 3 & w(2) \\ w(2) &= 4(2) + 3 \\ w(2) &= 8 + 3 \\ w(2) &= 11 \end{aligned}$$

$$\begin{aligned} 23) w(n) &= 2^{n+2} & w(-2) \\ w(-2) &= 2^{-2+2} \\ w(-2) &= 2^0 \\ w(-2) &= 1 \end{aligned}$$

$$\begin{aligned} 25) p(n) &= -3|n| & p(7) \\ p(7) &= -3|7| \\ p(7) &= -3(7) \\ p(7) &= -21 \end{aligned}$$

$$\begin{aligned} 27) p(t) &= -t^3 + t & p(4) \\ p(4) &= -4^3 + 4 \\ p(4) &= -64 + 4 \\ p(4) &= -60 \end{aligned}$$

$$\begin{aligned} 29) k(n) &= |n - 1| & k(3) \\ k(3) &= |3 - 1| \\ k(3) &= |2| \\ k(3) &= 2 \end{aligned}$$

$$\begin{aligned} 31) h(x) &= x^3 + 2 & h(-4x) \\ h(-4x) &= (-4x)^3 + 2 \\ h(-4x) &= -64x^3 + 2 \end{aligned}$$

$$\begin{aligned} 33) h(x) &= 3x + 2 & h(-1 + x) \\ h(-1 + x) &= 3(-1 + x) + 2 \\ h(-1 + x) &= -3 + 3x + 2 \\ h(-1 + x) &= 3x - 1 \end{aligned}$$

$$\begin{aligned} 35) h(t) &= 2|-3t - 1| + 2 & h(n^2) \\ h(n^2) &= 2|-3n^2 - 1| + 2 \end{aligned}$$

$$\begin{aligned} 37) g(x) &= x + 1 & g(3x) \\ g(3x) &= 3x + 1 \end{aligned}$$

$$\begin{aligned} 39) g(x) &= 5^x & g(-3 - x) \\ g(-3 - x) &= 5^{-3-x} \end{aligned}$$