

1.  $m(x) + k(x) = x + 6$
2.  $m(x) \cdot k(x) = -2x^2 + 9x + 5$
3.  $h(x) - n(x) = 1$
4.  $g(x) + n(x) = -2x + 1$
5.  $f(x) \cdot h(x) = x^4 - 2x^3 - 19x^2 - 10x + 6$
6.  $m(x) + k(x) + n(x) = x^2 - 5x + 7$
7.  $m(x) \div k(x) = \frac{5-x}{2x+1}$
8.  $n, h, f$ ;                respective minimums:  $-8, -7, -1$
9.  $g, k, f, m$ ;            respective y-intercepts:  $0, 1, 3, 5$
10.  $h, m, k, g$ ;            respective rates of change on  $[0,1]$ :  $-5, -1, 2, 3$
11.  $H(x) + S(x) = T(x) = 2x^2 - 56x + 500$
12.  $T(10) = \$140$  per computer
13. 14 computers
14.  $T(14) = \$108$  per computer
- ★ 15.  $(n(x))^2 + (m(x))^2 = x^4 - 12x^3 + 39x^2 - 22x + 26$