**Composite Functions GREEN**

|  |  |  |  |
| --- | --- | --- | --- |
| $f(x)=x+4$ and $g(x)=3x$Calculate $fg(2)$  | $f(x)=4x+2$ and $g\left(x\right)=x-1$Calculate $gf(-4)$  | $f(x)=x²$ and $g(x)=3x+2$Calculate $gf(6)$  | $f(x)=3x²+4$ Calculate $f^{2}\left(2\right)$ |
| $f(x)=5x$ and $g\left(x\right)=x-2$Calculate $gf(x)$  | $f(x)=2x+4$ Calculate $f²(x)$  | $f(x)=x²$ and $g(x)=5x-1$Calculate $fg(x)$ | $f(x)=2x²$ and $g(x)=4x+3$Calculate $gf(x)$ |

**Composite Functions AMBER**

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| --- | --- | --- | --- |
| $f(x)=x+4$ and $g(x)=3x$Calculate $fg(2)$ $fg(2)=f(3(2))=f(6)$   | $f(x)=4x+2$ and $g\left(x\right)=x-1$Calculate $gf(-4)$ $gf\left(-4\right)=g\left(4\left(-4\right)+2\right)$ | $f(x)=x²$ and $g(x)=3x+2$Calculate $gf(6)$ | $f(x)=3x²+4$ Calculate $f²(2)$ |
| $f(x)=5x$ and $g\left(x\right)=x-2$Calculate $gf(x)$ $gf(x)=g(5x)$   | $f(x)=2x+4$ Calculate $f²(x)$  | $f(x)=x²$ and $g(x)=5x-1$Calculate $fg(x)$ | $f(x)=2x²$ and $g(x)=4x+3$Calculate $gf(x)$ |

**Composite Functions RED**

|  |  |  |  |
| --- | --- | --- | --- |
| $f(x)=x+4$ and $g(x)=3x$Calculate $fg(2)$ $fg\left(2\right)=f\left(3\left(2\right)\right)$  $=f(6)$  $=6+4$  | $f(x)=4x+2$ and $g\left(x\right)=x-1$Calculate $gf(-4)$ $gf\left(-4\right)=g\left(4\left(-4\right)+2\right)$ | $f(x)=x²$ and $g(x)=3x+2$Calculate $gf(6)$ $gf(6)=g(6²)$  | $f(x)=3x²+4$ Calculate $f²(2)$ |
| $f(x)=5x$ and $g\left(x\right)=x-2$Calculate $gf(x)$ $gf(x)=g(5x)$  | $f(x)=2x+4$ Calculate $f²(x)$ $f²(x)=f(2x+4)$  | $f(x)=x²$ and $g(x)=5x-1$Calculate $fg(x)$ | $f(x)=2x²$ and $g(x)=4x+3$Calculate $gf(x)$ |