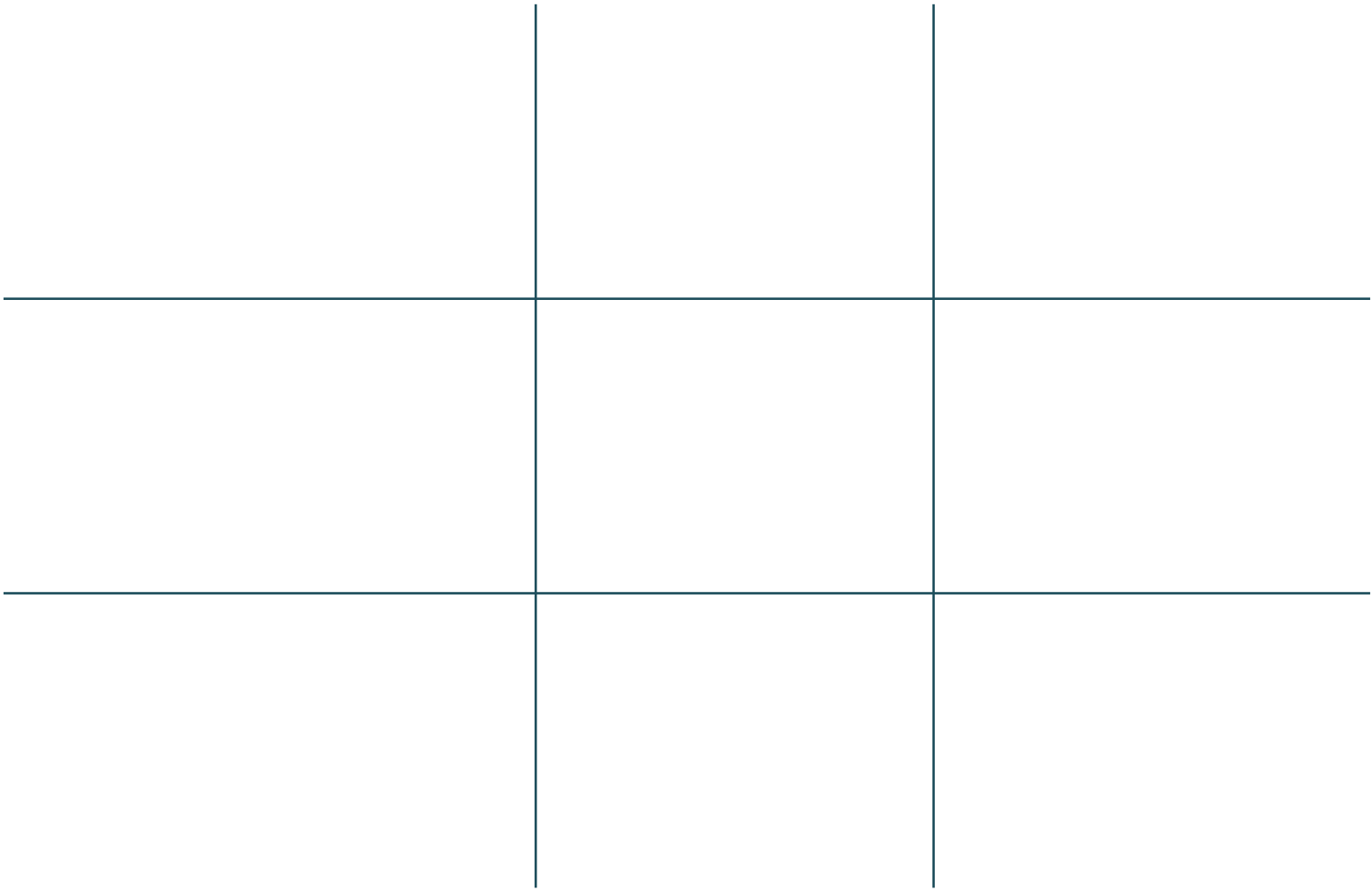
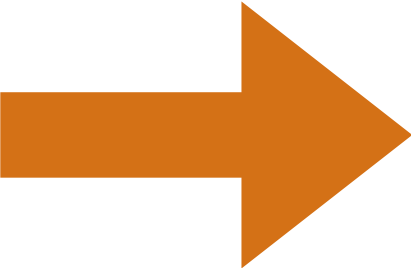


GILDING

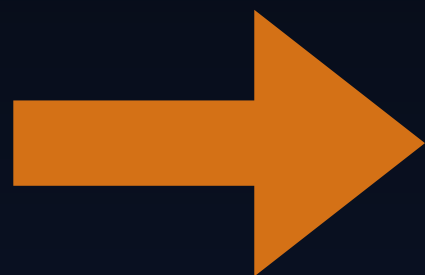


	Gilded Positive	Gilded Negative
Test Positive	$f(A, B, \phi)$	$f(B, A, \phi)$
Test Negative	$f(C, D, \phi)$	$f(D, C, \phi)$



GILDING

	Pyrite Positive	Pyrite Negative
Test Positive	A	B
Test Negative	C	D



	Gilded Positive	Gilded Negative
Test Positive	$f(A, B, \phi)$	$f(B, A, \phi)$
Test Negative	$f(C, D, \phi)$	$f(D, C, \phi)$

$$f(x, y, \phi) = (x + y) \left[\text{beta} \left(g(x, y, \phi), g(y, x, \phi) + 1 \right), \text{beta} \left(g(x, y, \phi) + 1, g(y, x, \phi) \right) \right]$$

$$g \left(x, y, \phi \right) = \left(x\phi + y(1 - \phi) \right) \sqrt{\frac{\left| \phi - 0.5 \right|}{\phi(1 - \phi)}}$$

GILDING

$$f(x, y, \phi) = (x + y) \left[\text{beta} \left(g(x, y, \phi), g(y, x, \phi) + 1 \right), \text{beta} \left(g(x, y, \phi) + 1, g(y, x, \phi) \right) \right]$$

$$g(x, y, \phi) = (x\phi + y(1 - \phi)) \sqrt{\frac{|\phi - 0.5|}{\phi(1 - \phi)}}$$