

$$1. y = 3 \tan(-2(x - \pi)) - 1$$

$$2. y = -\frac{2}{3} \sqrt[4]{x+7} + 5$$

$$3. y = |9(x-6)| + 12$$

$$4. y = 2 \sqrt[5]{-x} + 8$$

$$5. y = \frac{1}{2(x+1)^4} - 5$$

$$6. y = -\left(\frac{3}{2}\right)^{-2(x-1)} + 7$$

$$7. y = (5x)^2 + 1$$

$$8. y = 6 \log(-x) - 4$$

$$9. y = \frac{2}{3} \cos 2(x-1)$$

$$10. y = -\sin 2x - 1$$

T-PC**Function Families****Describing Transformations**

For each problem, give the parent function, tell what a, b, h, k are, then describe the transformations using the proper vocabulary: stretch/shrink/reflection/translation/horizontal/vertical/#'s w/ R, L, U, D

1. Parent Fcn: _____

$a =$ _____

$b =$ _____

$h =$ _____

$k =$ _____

2. Parent Fcn: _____

$a =$ _____

$b =$ _____

$h =$ _____

$k =$ _____

3. Parent Fcn: _____

$a =$ _____

$b =$ _____

$h =$ _____

$k =$ _____

4. Parent Fcn: _____

$a =$ _____

$b =$ _____

$h =$ _____

$k =$ _____

5. Parent Fcn: _____

$a =$ _____

$b =$ _____

$h =$ _____

$k =$ _____

T-PC

Function Families

Describing Transformations

6. Parent Fcn: _____

a = _____

b = _____

h = _____

k = _____

7. Parent Fcn: _____

a = _____

b = _____

h = _____

k = _____

8. Parent Fcn: _____

a = _____

b = _____

h = _____

k = _____

9. Parent Fcn: _____

a = _____

b = _____

h = _____

k = _____

10. Parent Fcn: _____

a = _____

b = _____

h = _____

k = _____